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IPPINCOTT'S
OME MANUALS

THE BUSINESS OF THE HOUSEHOLD

C. W. TABER

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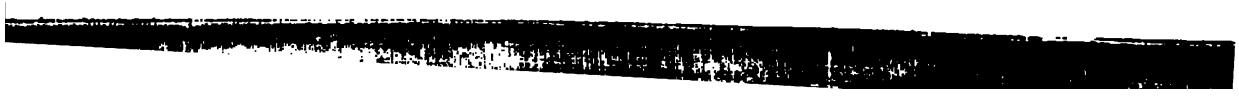

LIPPINCOTT'S HOME MANUALS
EDITED BY BENJAMIN R. ANDREWS, PH.D.
Teachers College, Columbia University

THE BUSINESS OF THE HOUSEHOLD

BY
C. W. TABER
AUTHOR, TABER'S DIETETIC CHARTS, TABER'S CHART OF THE DIGESTIVE SYSTEM, TABER'S PHYSIOLOGICAL CHARTS, NURSES' MEDICAL DICTIONARY, ETC.

WITH THE ASSISTANCE OF THE FOLLOWING PROFESSIONAL AND TECHNICAL EXPERTS:

S. MARIA ELLIOTT, A.M., AND MARY B. STOCKING, S.M.
SIMMONS COLLEGE, BOSTON
NINIAN H. WELCH, B.S., A.M., LL.D.
MASTER-IN-CHANCERY, CIRCUIT COURT, CHICAGO
PROFESSOR, PERSONAL PROPERTY AND SALES, CHICAGO, KENT COLLEGE OF LAW.
WILLIAM A. DURGIN
ELECTRICAL EXPERT FOR THE COMMONWEALTH EDISON COMPANY, CHICAGO

ILLUSTRATED

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PREFACE

THE economic conditions confronting the American people to-day have made opportune a detailed study of the business of the household and of household finance, such as is presented in this book.

The "efficiency" idea has revolutionized many an industry and changed thousands of processes and methods in factories, offices and stores; but it remained for "the high cost of living" to introduce efficiency into the business of the home.

In searching for leakages in the family purse, two important facts recently have been recognized. First, it has been found that the work of the home is a most complex industry, involving factors dealt with in the factory, the office and the store, and in nearly every branch of business. Second, it has been found that this intricate business, representing an annual expenditure of from six hundred to many thousands of dollars per family, has been conducted without thought of business principles or methods, and that "efficiency" is just as necessary in the home as it is in the commercial world. The idea that housework is degrading or menial has been abandoned, and we are now awake to the fact that the successful home-maker must make a business study of the principles and practices involved in housekeeping.

The necessity that confronts every family to-day, demands either an increased income, a greater purchasing power for that income, or a decreased expenditure. These facts bring us face to face with many fundamental principles that either have been unknown or ignored if known.

In colleges and other higher institutions where home economics is taught there is need of a comprehensive text dealing with the household budget and other financial and business matters, and this book it is hoped may serve that need.

The public schools have done much in enlightening our girls upon the mysteries of cooking, and an attempt has been made to introduce other household arts into the domestic science curriculum; but the time has come when a subject involving all of the problems of the making of a home should be presented to high school girls for their consideration. Boys, too, should be introduced to their home responsibilities.

Indeed, even the students in the upper grades of our elementary schools, and in the new junior high schools which are being organized, are competent to study practical problems of household finance, which after all are merely applications of arithmetic. Such applications should be based upon sound theory as to the meaning of the home and management of its business.

This book may be put as a text-book directly into the hands of upper high school and college students, and it may also serve as a reference book for the teacher of home economics in schools of all grades. The latter, by selecting subject matter from the book, may bring into her instruction in cooking, sewing, and household management simple lessons in household business. As a text, this book, it is believed, will be available not only for girls in the home economics courses, but for mixed groups of boys and girls, who thus may follow a course in the economics of the household.

Schools that have offered something of household study to boys, such as camp cookery, the principles of nutrition, or house-planning, have been surprised to find a quick response. The present subject of household finance is one, which by its nature appeals even more strongly to boys, for the finances and business of the home is a matter in which the man of the house always has taken equal responsibility with the woman.

Teachers of economics and civics who have been trying to make their courses apply to the practical issues of every-day life, will find this book of direct help in furnishing material which can be used in discussing personal and household economics in their relation to the economics of public welfare and business.

The book is also planned to be of practical service to the homemaker and housekeeper. In the short courses and other extension instruction of the colleges; in the work of the women's clubs; in the rural teaching of home economics to groups of farm women; and in the study of the family budget and household accounts, which women everywhere are making, this book will serve as a text, and as a reference work.

The men of the house will be found equally interested in these matters, and if home-study clubs with a membership of two will consider the plans here outlined, and if they will faithfully carry out the suggestions made, the problem of home finance will straightway be solved.

Where the book is used as a text in schools, it is recommended that students, as far as possible, make a study of their home problems, securing the co-operation of their parents in considering the questions that arise in the course.

The study of the business of housekeeping, as presented in the following chapters is not theoretical. The suggestions given come from a practical experience of nearly a quarter of a century in the management of a household. In studying this subject, however, one must take into consideration the human equation. Conditions are not standard and every family represents a variable unit that cannot be considered a basis upon which to pattern methods for another home, but from the experience of every family one may learn something that will help in solving similar problems. It is with such an expectation that this work has been offered to the home-maker and student of the Business of the Household.

SEPTEMBER, 1918.

THE AUTHOR.

ACKNOWLEDGMENTS

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This acknowledgment would not be complete if the author did not publicly express his apppreciation to the one who for twenty-five years has been teaching the writer what he has learned about the business of the household—my wife, who has made this book possible.

THE AUTHOR.

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THE BUSINESS OF THE HOUSEHOLD

PART I

FUNDAMENTAL PRINCIPLES OF HOUSEHOLD FINANCE

CHAPTER I

HOUSEHOLD MANAGEMENT A PROFESSION

HOUSEHOLD management is both a practical art and a trained profession. Not until it is recognized as such will the average home be maintained upon an efficient and economical basis. It is as much a business enterprise as is the running of a store or office, or as is the operation of a factory.

A Wrong Conception.—The time was when we thought, if we did not say, "Anyone can be a farmer." Now we know differently. We realize that in order to be a successful farmer, there not only must be adaptability of the individual to that particular activity, but that both a general and a specific education is necessary. Many a tired mother used to say, "Oh, any ignorant woman can bear children, cook, mend and sew, wash dishes, scrub floors, and do such menial work about the house." The time has gone, however, when housework is considered menial, if it ever was so thought of, and we now realize that if a housewife is going to be anything better than a drudge and a slave, she must possess a special knowledge that requires a certain specific education in addition to experience.

Men have belittled this idea and have scoffed at the thought of comparing a woman's work in the home with a man's work in the office, the factory or store, but they are rapidly changing their conception of household management and home making. Perhaps the low value that the woman herself has set upon her own work in the home, may have been largely responsible for the man's attitude

Home Making a Highly Specialized Industry.—As in the factory, so in the home, raw material must be purchased and converted into finished products; countless operations must be supervised and directed; various seemingly detached enterprises must be fostered and developed and made to co-ordinate with all of the general family activities. The labor problem must be considered and dealt with; heating and illuminating factors must have attention; capital must be invested and turned to the best possible advantage. Overhead costs, running expenses and depreciation insistently demand intelligent attention and with all these problems, the human equation of relationships, of intimate family ties combined with the perplexing questions of education, ethics, religion and society, demand serious thought.

The business man may say "business is business," and with the saying of it dismiss all questions of personality, of possible friendships or moral relationships, but the home manager cannot escape these considerations. She must not only consider every detail of every problem of household activity but such problems must be considered in relation to every individual in the household. Nor can her household be considered as a detached unit. It is linked with social activities and is related to and affected by the public welfare. In the faithful discharge of her duties the household manager is constantly sounding the gamut of all the human emotions.

Conditions Now Different.—As culture and civilization develop, life becomes more and more complex. We often hear of the problems that confronted our grandmothers, and how they toiled until long after dark; but strenuous as were their lives, they, after all, were comparatively simple as compared with present day standards. Their problem was largely a problem of time and labor. There was just so much work to do, so many in the household to perform that work and so many hours a day in which to accomplish it. During the early life of our grandmothers, before 1850, nearly all that was eaten or worn was produced on the farm and in the home. Spinning and weaving and sewing and mending; the making of butter and of candles, the putting up of preserves and jellies and jams, cooking and baking, the manufacture of soap, nearly all that contributed to the sustenance of the body and its outward protection was a part of the duties of the housewives and their daughters in those "good old" days. Strenuous work it was, of course, but if the present day

spiritual side of life, but it is just these principles, which properly understood and applied will provide for increased material demands.

Thrift and saving are admirable and they should not be underestimated, but neither should they be over-estimated. Miserliness is despicable; hoarding is vulgar; both are selfish, fatal to character and a danger to the community and nation.

Despite the constantly increasing cost of living, economists and bankers are urging the necessity for saving. All kinds of devices are being invented to attract the salaried man's earnings into the bank. Bankers say that lower earning capacity and the fear of hard times increase savings deposits. Although increased savings deposits may be a desideratum for both the banker and the broker, danger lurks in the unqualified statements made by those interested in getting people to save. There are times when it may be asked, "Is it worth the price?" If savings means stunted lives, that is, physical derelicts or mental incompetents during this or the next generation through enforced self-denial and the absence of bodily comforts or the starving of mental cravings and the sacrifice of spiritual development,—then the price of increased bank deposits is too high.

Bank Balance May Cost Too Much.—It is possible to be so self-sacrificing in saving as to stunt self-development. A growing bank balance is not desirable at a tremendous sacrifice of the standards of living.

If a part of these savings was expended for better living quarters, better nourishment, fewer hours of toil and worry, a better physical endowment and a broader education, would not such results prove of far more value to the individual, and the community, and would not the wealth of the next generation, if not of this one, be greater? To leave money to children instead of using it in making them fully capable of acquiring their own often proves a curse.

It is necessary to form habits of thrift, but if in addition to the increased cost of life's necessities and the higher standards of living demanded, one must assume the added burden of unduly swelling a savings account, there will be little left to life but a wild scramble to accomplish the impossible. To meet such exigencies, every member of the family may be subjected to a process of self-denial and of sordid economizing that can only result in the wilting of worthy ambition, the dwarfing of soul and the stunting of the mind and body.

Regardless of the fabulous stories told of the wonders accom-

plished by savings, what do we know of the price paid for that kind of success? No man on a wage or a reasonable salary can possibly acquire a fortune from what he can save, and at the same time provide his family with the comforts and education to which they are entitled, and should he succeed, the effort would take the greater part of his life and then the fortune would probably be left for others to enjoy or fight over.

False Standards of Living.—The cost of "high living" means for many families, the cost of "false standards of living." The first lesson should be how to do without that which we are not entitled to, and how to distinguish between real necessities and luxuries.

Most of us can and should dispense with automobiles, piano-players, expensive talking-machines, diamonds, silk underwear, shoes that cost from ten to twenty dollars a pair, to say nothing of servants and maids and visits to the hair-dresser.

We might live just as comfortably in five rooms as in the ten we may be occupying. It is not necessary to be living next door to a millionaire, or to have a cottage at the sea-side or in the mountains, or even to visit a summer resort once a year. We have no business to care what the Smiths think or what the Browns may say. We have no moral right to play bridge for money or prizes, or to entertain beyond our means in order to keep up with the procession of "our set." We have no justification for belonging to expensive clubs or sororities or societies when household necessities must be sacrificed as an offset to this extravagance.

There are very few families entitled to purchase club steaks or other expensive cuts of meat every night for dinner. Neither are we justified in loading our tables with hot-house fruits and vegetables or garden produce shipped a thousand miles when out of season in our own climate. These denials should not be considered economies. When over eighty per cent. of the people of these United States are living on an income of not more than $1200 a year, indulgence in such things for most families is nothing but sinful extravagance.

When will we learn that there is nothing in furniture, pictures or rugs, or in any material thing that can or will bring us lasting happiness. The simple life need not be the farm or suburb, but it should mean a saner standard of living. Life without grind; life without the eternal struggle to keep up appearances; life without a thought

of what the gossip's tongue may say. Just living one's own life, in a modest, unassuming manner, content with enough wholesome food to eat, with a reasonable amount of neat apparel; with a modest home whether it be in a house or an apartment, in a decent neighborhood and a pleasing environment. Simple pleasures and homely joys; a few friends; good books; music; husband and wife; parents and children, and then—if possible, a few dollars saved at a time and placed in the bank or in a safe investment toward a competency for old age. What more is needed to make for happiness?

A Saner Policy Advocated.—And so, every young couple just starting out in life, should honestly face the two principles that confront them at the outset. Is the future to be built upon the sordid accumulation of money and the things which money will buy to the exclusion of the higher things of life, or if one must be sacrificed, will it be the mere hoarding of dollars? Let their policy be first, the things of the higher life, with the accumulation of as many of the material things as may be acquired without a sacrifice of their ideals, for after all, we can take nothing with us into the next life, and after we have gathered together the things of this world we find they are not worth the effort and the sacrifice necessary to acquire them.

Married Life vs. Single Life.—As stated at the beginning of this chapter, "the raising of a family, large or small, is man's first duty to the human race and to society." The man and wife who have successfully accomplished this have enriched the world. Successfully to rear and train and educate three or more children is a task that is not sufficiently appreciated by the world at large. One might truthfully say, as of virtue, that the task is its own reward. It is, although it should be entitled to more recognition than that.

Statistics are said to show that married men live longer than bachelors, probably because of their more or less regular habits and the care received in the home from a loving and efficient wife. In many industries, the character of the wife and home is inquired into before a man is hired. It is also claimed that the married man attains as much of this world's goods and as high a standard in the world as the bachelor. If this is true, then he succeeds in the face of a considerable handicap.

A married man in some ways is placed at a disadvantage in the economic struggle with every single man with whom he must compete. As an example, Mr. Holmes has three children and a wife.

He is in the same business in which Mr. James is engaged. Mr. James has no one but himself to support; as a result Mr. James boards. In order to raise his family properly, Mr. Holmes finds it necessary to buy or rent a house. If he buys it, the state taxes him for providing his family a decent place in which to live. Instead of having only one to support, Mr. Holmes must earn enough for five; hence he cannot save as much as Mr. James can, nor have such savings to invest in his business. All the expenses involved in raising a family place Mr. Holmes at an economic disadvantage with Mr. James. If in the face of these conditions, Mr. James fails to succeed as well as Mr. Holmes, all other things being equal, it must mean that a single life lacks impetus or spells selfishness, and that expenditures are made for self-indulgence, legitimate though they may be, that are not a part of the budget of Mr. Holmes. It means that the better care received by the married man and the establishment of regular and good habits all go to equalize the difference in the economic conditions enjoyed by each type of business man.

Woman's Work a Productive Factor.—Another factor that increases the married man's efficiency, is the fact that his wife works productively in the home, while he contributes his earnings to the family. The part contributed by the wife, though different in character and scope, is equally as valuable as the husband's efforts. Together, a better living is obtained than that which usually falls to the unaided efforts of the unmarried man.

There are, it is true, many compensations for the cares involved in family life, but it does sometimes seem that the state should at least equalize the unequal competition between the married and the unmarried. The man or the woman, who deliberately chooses the single life, or being married selfishly refuses the duties of parenthood, should be compelled by the state to contribute to the care and the support of orphan children. The poodle-dog woman should be ostracized by every right-thinking wife and mother. The man or the woman who does not in some way directly contribute to society or the world at large is a parasite. Merely to earn enough to provide for one's own needs or luxuries is not sufficient. To enrich the world by bringing into existence something that did not exist before, whether it be a beautiful picture, a work of art, a book, a more beautiful flower, a new type of vegetable or fruit, a house, a skyscraper or —above everything else—a child, is a type of accomplishment that differentiates between the parasite and the real man or woman.

QUESTIONS

1. What is meant by the "higher things of life"?
2. Name two fundamental principles of life.
3. What may be termed "a materialistic principle of living"?
4. Under what circumstances if any should saving be discouraged?
5. Can one acquire wealth from what can be saved from a salary?
6. What are the principal extravagances of the average family?
7. What might be called economies in the maintenance of a family?
8. Should environment be sacrificed for the purpose of reducing the cost of living? In order to secure a competence against old age?
9. Do you owe a duty to society? Why, and how can it be met?
10. Is a married man upon an equal economic or competitive footing with a single man? In what way is the married man handicapped?
11. What factors contribute to reduce the single man's advantages over the married man?

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CHAPTER III

THE FAMILY INCOME

THE handling of the family income has always had possibilities of misunderstanding and friction between husband and wife, and perhaps it has been more of a factor in the development of the twentieth century feminist than generally has been supposed. That it has been and still is a serious problem in many families is evident to every careful observer. Many a family has been wrecked upon this rock in the matrimonial sea, and until some practical method can be evolved that will prove satisfactory to both parties in determining the relation of husband and wife to the family income, it should be the duty of parents and educators to warn children before marriage, of the need of making definite plans for the disbursement of the family funds. Some plan for the use of their money is one of the many important matters regarding which young people should come to an understanding before marriage.

It may, then, be well to consider some of the methods in vogue for disbursing the family income. Although the value of any method depends upon the spirit in which it is carried out, there are obvious advantages and disadvantages in each.

The Doling Method.—This is possibly the most common, as it is certainly likely to be the most pernicious plan. It may even assume the form of charity or largess dispensed by a condescending husband to a timid wife. Such a wife is compelled to cajole her husband almost daily in order to extract a dollar from him for the day's groceries. "Why! what did you do with that fifty cents I gave you yesterday," is the usual reply of such husbands. Such a morning ordeal is the daily crucifixion that many a wife endures. No woman can maintain her self-respect and submit to this daily process, year in and year out, and it is certain that no man would consent to conduct his employer's business on such a basis.

No woman should be compelled to ask the "head of the family" for money, whether it be for household necessities or for her own personal use. It takes money to run a home, to buy food and to clothe the members of a family. Some men seem to rediscover this wonderful fact every day and then forget it until the next day.

The Allowance Plan.—While this method is much better than the one just mentioned, it has its defects. One of the principal objections to it is that oftentimes it is based upon a wrong principle. For many centuries "to allow" meant only "to tolerate," "to permit." Some husbands act upon the old meaning of the word, and no wife should be simply tolerated. The word allowance in this sense smacks of condescension. Parents sometimes place their children on an allowance, and children grown do not see the incongruity in the husband giving and the wife accepting such a nominal gratuity. The word now has another meaning, "to grant as a right," "to share." With this understanding of an allowance one need not quarrel, whether the one who receives be the wife or the child. But too often, in the case of the wife this allowance or stipulated sum of money is not for herself, but that she may save husband the trouble of paying for the meat and the bread and the many petty bills that come in to every householder; if the wife is an expert purchasing agent, and an expert manufacturer, and an expert cook and manager, if there is anything left from the weekly or monthly allowance she generally is allowed to retain it as a commission for her services, or perhaps to be spent for some article with which to adorn herself and thus to become more attractive to her husband.

Fortunately, many wives are not sufficiently sensitive to detect in this plan any insult to their position as equal partners. They feel such a freedom from the restrictions of the "doling method" to which Mrs. Smith is subjected, that they perhaps never think of the fact that the wife is not her husband's clerk nor his manager, *but his partner,* and that as a member of the firm she has the same rights in the business and its income as her husband-partner.

Aside from sentimental reasons or matters of principle, another objection to this plan is that it usually holds the wife to strict accountability to the husband for the expenditure of the allowance. While every wife probably would be glad to go over her accounts with her husband, and perhaps even be anxious to detail to him the bargains she had secured, the necessities she had gone without and the money she had saved, the feeling that she *must* or that she *should* make an accounting or report to her husband at the end of the week or month, is anything but a pleasant ordeal. Of course, there are many husbands who say they do not expect such an ac-

counting, but the wife cannot but feel that she should render an accounting, whether it be expected or not.

Another defect in this plan lies in the fact that often expenditures must be made during an allowance period of a week or a month, that cannot possibly be met by any one week or month's allowance. Clothing eats up money and the demand for clothing is largely seasonal, principally coming during the spring and late fall months. Ten or twenty-five dollars or more a week might take care of the average weekly household bills and yet the allowance probably would not be sufficient to meet the seasonal demands for clothing. To meet this difficulty, a portion of each weekly or monthly allowance must be set aside in order to accumulate a sufficient sum to defray the expense for such purchases. Such emergencies have resulted in the scheme of apportioning the allowance into certain sums and keeping them separately in boxes or envelopes, one for clothing; another one for food, etc. Such methods may sometimes prove useful where the wage is small and expenditures few.

If the allowance is small and given in cash, another handicap that this method imposes upon the wife is carrying money about the person or keeping it in the house. Actual loss through pickpockets, sneak thieves and burglars, carelessness and fire is by no means a negligible factor to be considered. The home manager has too many other important problems with which to contend without making a banker of herself or a safety-deposit vault of her home.

Another objection, though not inherent in this method, is that it usually results in paying cash for everything purchased. This means that small change must always be kept on hand. Often necessary purchases are neglected because of the difficulty of getting change for a bill. The paying of cash means an effort to account for every penny or dollar almost daily for fear of loss or mistakes in the handling of the same. This may seem trivial to many but it is a real bugbear to every housewife who adopts this method.

The Charge System.—A practice common among families of means, as well as with those of a fair income, is the charge-account plan. Charge accounts are maintained at all the principal stores, and wives are given *carte blanche* to order and to charge anything needed, or perhaps desired. Bills are rendered monthly and perhaps paid by the husband without question, but wives having such accounts at their disposal are sometimes at their wit's end to find

methods for securing ready cash. Many a wealthy man's wife is often unable to secure cash for car-fare.

All such methods rob the family of the value of participation in a joint planning of expenditures by husband and wife. The partnership basis cannot obtain under such methods, and the results are the disadvantages of the "doling plan."

It is not the credit system that is at fault; for that has its very decided value as elsewhere stated, but when the credit system is merely used to deprive the wife of ready cash and absolve the husband of participation in joint responsibility for the family expenditure, then the credit system is made to serve a purpose for which it is not intended.

The Only Fair and Businesslike Method.—"A horse that will not stand without hitching, is not worth having," is an old saying. Husbands and wives take each other for "better or for worse." They assume from the very first day of wedded life, that they can trust each other, and trust will be the basis of their future happiness. Without it happiness simply cannot exist. If a husband feels he cannot trust his wife's judgment in money matters, the first thing necessary is for both to study the problems of expenditures together, and to come to an understanding as to the practical rules that shall guide in the use of their common resources.

A woman who is not to be trusted with her husband's earnings, his income and his property, is not to be trusted with his honor, his reputation or with his name.

Before accepting this plan of the joint management of income, the phrase "husband's earnings" or "husband's income" must be eliminated from the family vocabulary.

The method proposed is based first upon the contention that whatever money a husband may secure from his employer, or from his business, belongs as much to the wife as to the husband; that although her work may not have been directly contributed to her husband's employer, or to his business, the wife's efforts make it possible for the husband to give the very best that is in him to his employer, or to his own business. The idea that a woman can toil and slave and maintain a home for a husband; that she can bear and rear and clothe and feed his children as well as care for himself; that she can wreck her physical life in the doing of it, and all this without monetary compensation, or a right to share in what her husband has earned, or without receiving equal credit for conserving

it, is a supposition that needs to be disputed. The productive labor of the wife within the home must be counted an off-set to the husband's earning ability for *together* they secure the living of the family.

Whatever wages or salary or income a husband may bring into the family, already has been in part earned by the wife.

Until the above principle is recognized there can be no permanent efficiency of an economic nature in the home.

If either party at the time of marriage is possessed of money or property, personal or real, it may well become the joint possession of husband and wife as in a business partnership. Whatever money is possessed by either party at the time of marriage; whatever money is received by either party during the marriage relation, whether earned as wages or salary or received from income or dividends, gifts or bequests, *should be placed in the bank, in one common fund, subject to use and withdrawal by either party, without the explicit consent or signature of the other party.* This is the ideal toward which society is moving.

Many husbands undoubtedly may shudder at the bare thought of such a high-handed method, and yet they will not for one moment hesitate to admit that they trust their wives implicitly. If so, there is no excuse for any other method of managing the household funds. This method, of course, means the opening of a bank account, if one does not already possess one. The subject of the bank account will be considered in the next chapter.

A joint bank account should be opened in the name of *both husband and wife,* or the account may be opened in the husband's name in which event the husband should give his written consent to the banker to have his wife sign his name to checks. The joint account is preferable as the wife's signature would then be legal in case of the death of the husband, which probably would not be the case under the other method. With this arrangement in force, either party will at any time be able to withdraw any or all of the funds in the bank to the credit of the individual or joint individuals as the case may be, and the signature of the other party will not be necessary. In the partnership of which we are speaking, neither partner will take advantage of the other.

Every dollar earned by the husband or received by him or by the wife should be deposited to the credit of the bank account. It is

not intended that merely the wife's weekly or monthly allowance be deposited in this way, as this plan does away with such things as allowances, but it does mean that *all income* from *every source* be deposited.

Having accomplished this much, *all expenditures and the payment of all household bills should be made by check.* The method of accomplishing this will be explained later. Of course, where there are petty items to be paid for in cash, such as articles purchased from hucksters, the home manager should arrange to draw sufficient cash every week, with which to defray such expenses, including car-fares and similar needs.

"What is mine becomes yours, and what is yours becomes mine," should be the principle upon which to base all future problems of household finance.

Real Estate and Personal Property.— In order to carry out the spirit of this plan, all real estate and personal property should be held in common by both parties.

Real estate in the name of either husband or wife, at the death of the party holding the same, becomes subject to probate but unless disposed of by will the courts must determine who are the rightful heirs of the deceased. The law varies in different states regarding the inheritance of real estate, and whether one leaves a will or not, there are certain legal formalities that must be observed before the heirs are able to perfect their title. In order to avoid this, and to prevent all litigation, a *joint tenancy deed* should be executed covering all real estate owned by either party, if the law of the state recognizes such a deed. By this arrangement, the real estate is held in the name of both husband and wife, and in the case of death of either party, the real estate becomes the property of the surviving partner without any further legal action of any kind.

Real Estate Held "In Common."—Real estate held in the name of both husband and wife, other than in *joint-tenancy,* at the death of either party, becomes subject to *probate,* the same as though it had been held in the name of either one or the other. In such cases, the court must determine the share originally held by the survivor before making disposition of the share left by the deceased.

There is a vital difference between *Joint-tenancy,* and real estate held *"In common."* The former is only possible when provided for by state statute.

Summary.—With all real estate and personal property held in this way and all money received turned into one common fund, subject to the demand of either partner with or without the consent of the other, we have a fair, just and business-like arrangement for both parties; one that is based upon faith and trust in each other; an arrangement that is, and always has constituted, the basis of every business partnership.

QUESTIONS

1. Name the various plans adopted for the distribution of the family income. Which one would you favor? Why? What objections can you offer to the various methods mentioned?
2. For your own information, ascertain the methods used in your own home.
3. Do you think that a wife is entitled to an equal right with her husband in his earnings? If so, why?
4. Is the law governing the inheritance of property the same in all states?
5. How should real estate be held by married people?
6. For your own information, if possible, find out what proportion of the real estate, in case of the death of a father, would go to the wife and what proportion to the children.
7. What is a joint bank account?
8. If a bank account is in the name of a husband how may it be arranged so that the wife may draw checks upon that account?
9. Does the law of your state provide for holding real estate in joint tenancy?

THEMES FOR DEBATE

Resolved:

1. That the Allowance plan of apportioning the Family Income is not economically sound or just.
2. That the wife should have as much right and freedom in and to the family income and property as the husband.
3. That property, real estate or personal, belonging to the wife before marriage should after marriage be pooled with the husband's resources as the common property of both.

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CHAPTER IV

THE BANK ACCOUNT

A BANK account is a very necessary factor in the management of any home. This suggestion holds for the man on a small salary the same as it does for a man of means. Many a man probably will say "O, I don't earn enough," or "I can't get enough together at any one time to warrant me in opening a bank account." Many think the bank will not care for a small checking account. Not so; the time has gone when the average banker refuses an account because of the limitation of the daily balance, except in the larger cities. Even then, the small fee of a dollar a month where the daily balance is less than $200.00 may be well spent in getting this account started. The modern banker especially in the smaller cities and in the suburbs of the larger cities, invites family deposits.

Any man earning twenty to twenty-five dollars or more a week should maintain a bank account, and pay all bills by check. Every farmer's family should have a bank account.

In fact, it is just these men that need the services of the bank the most, as is shown in the discussion of "Credit."

Opening an Account.—Every married couple, then, if they have not already done so, should at once open a bank account. Husband and wife should visit the banker together, introducing themselves or having some friend do this for them. They should state their circumstances to the banker without reserve. The husband should give the name of his employer, with any information regarding his work or position or prospects that might seem of interest to the banker. If in business for himself, the husband should give the banker a statement of the financial condition of his business. If real estate is owned by either party this fact should be made known.

A joint account should be opened in the name of both parties as explained in the previous chapter, or it should be arranged so that both parties can sign checks against the account. The signature of both parties will be required by the bank to be placed on file for identification purposes. Either party will now be able to draw funds without the signature of the other party.

A few words may be said in explanation of the various processes

DEPOSITED IN THE

Evanston Trust & Savings Bank

EVANSTON, ILLINOIS

By John Smith.

June 3rd 1918

Please List Each Check Separately

	DOLLARS	CENTS
Currency	75	00
Gold	10	00
Silver	5	75
Checks		
Chicago 2 50		
Omaha 12 50		
P.O. Money Order 1 50	18	50
Express " 2 00		
18 50	58	75

See that all Checks and Drafts are endorsed.

FIG. 1.—A deposit slip properly made out

with which the depositor will come in contact from time to time and the steps that must be taken for the first time by anyone who has never had a bank account.

Deposits.—In depositing money, checks or drafts in a bank, a memorandum furnished by the bank and called a "deposit slip" must be made out by the depositor. The following data should be entered on such a slip.

1. The name of the person whose account is kept.
2. The date of the deposit.
3. The character and amount of the deposit, entered as indicated by the printed slip, which generally is as follows: (a) currency, (paper money); (b), gold; (c), silver; (d), checks, (drafts, post office money orders, etc.) listed by items.
4. The total of the deposit.

Fig. 1 is a reproduction of a deposit slip properly made out.

Having made out the deposit slip it should be handed with the deposit and bank book to the "Receiving teller" who will enter the amount of the deposit in the bank book.

Some banks do not "balance" bank books at the end of the month, unless requested to do so; a statement made on the adding machine is used instead. With such banks the bank book is rather a useless thing. If one does not wish to keep up the bank book, an exact duplicate should be made of the deposit slip. The teller then signs this slip which is retained by the customer at least until the month's statement has been received and checked up. If the deposit shows on the statement the slip may be destroyed.

Checks.—A check is merely an order on the banker to pay to some one a certain sum of money, and this order is signed by the depositor against whose funds the check is drawn.

In filling out a check, which already bears printed upon it the name of the bank, the name of the place where it is located, and the order to the banker to pay, there are five spaces to be filled and six that may be utilized as follows:

1. Date.
2. Number of the check (if one desires to number all checks).
3. The name of the person to whom the payment is to be made.
4. The amount to be paid written out in full.
5. The amount to be paid written in figures.
6. The signature of the party drawing the check.

Fig. 2 is a copy of a check properly made out.

Making Out Checks.—No space on the check should be left so that the amount of the check could be raised by adding another figure before or after the amount. For instance if the amount "One and 56-100" was written in such a manner it might be raised to read *"One Hundred One* and 56-100" or *"One Hundred* and 56-100" by inserting the extra word or words before or after the original amount, if sufficient space is left by the one making out the check.

Endorsing Checks.—Checks payable to "bearer" should not be endorsed until one is in the bank ready to present them for payment or deposit, because if lost anyone may cash them.

When endorsing checks, turn the check down on its face and write your name on the back at the top of the left end of the check

FIG. 2.—A check properly made out

When sending checks through the mail for deposit, endorse them payable to the bank as follows:

Pay to the order of
The City Nat'l Bank for the credit of
John Jonquil.

A rubber stamp may be made for this purpose if desired. If lost in transit checks so stamped cannot be cashed by the finder.

Notations may be made upon the end of the check to the left or in the lower left-hand corner. If the words, "Payment in full" or "Payment in full to date" is so written on a check, the endorsement of the one to whom the check is made payable, is a receipt in full for payment of an account due to that date, and the payee cannot recover more money from the payer in payment of that bill.

An endorsement on the back of a check is a legal receipt for the amount of money for which the check is drawn.

Do not make a check "Payable to bearer," as it then becomes the property of anyone holding it, and no endorsement is necessary, so that the check itself does not serve as a receipt for the money paid.

Checks Payable to Officials.—Checks made to officials, such as the treasurer of the county, of a lodge or club, should specify the official position of the drawee or individual to whom the check is made payable as follows:

"John Smith, Treasurer of Cook County."

or

"James Jones, Collector Evanston Township."

If it were made out in the name of the individual without stating the official position, it would be evidence that the check was intended for personal use, and if it were appropriated for personal use, in order to recover the amount of the check, one would have to prove it was intended for the official and not the personal use of the individual.

Checks Delivered to Collectors.—Some companies employ official collectors, but in paying bills to such collectors, it is better to make out the check in the name of the company to whom the money is due, and in no case in the name of the collector, unless the word "Collector" is inserted after his name. Even then it would be better to write the name of the company also, as "John Smith, Collector, Smith & Co."

Altering Checks.—If a mistake has been made in writing a check, tear it up and make out a new one. Many bank checks are printed on a chemically prepared paper especially designed to show any alteration or erasure, as a protection against attempts to alter or raise the amount of the check.

Holding Personal Checks.—One should not hold checks but should present them to the bank for payment at once. Unless presented in the usual course of business, the courts would not protect one in recovering the amount of a check in case there were no funds to meet the check when it was presented. Funds might have been in the bank to meet the check at the time it was drawn, but if the holder failed to take reasonable precaution in presenting it for payment in the ordinary course of business, the holder of the check could not recover on it if there were not funds to meet it upon its delayed presentation.

Exchange on Personal Checks.—One should not send personal checks away from home in payment of bills or orders, as banks

charge "exchange" or a small fee for collecting and handling s checks, unless they are made payable through the "clearing ho of some central city. One can secure a bank draft from one's b for this purpose.

The Clearing House.—In the larger cities, the banks in g standing form an organization in their city called a "Clea House." Such banks are constantly receiving the checks and dr of each other, and instead of sorting them out and returning t to each bank individually for payment, they are sent to the Clea House, where representatives from all banks in that city who members of the Clearing House meet at certain hours and take f each other all checks and drafts drawn on their own bank. sonal checks that bear the printed words, "Payable through Chicago Clearing House" would not be subject to exchange for lection. The same would be true if "New York" appeared on check instead of "Chicago," as these two cities represent the cen of exchange for the entire country.

Check-Stubs.—Before making out a check, fill in the stub actly as the check is to be drawn. The number on the stub sh agree with the number on the check.

In asking for a check book for family use, it will be found m more convenient to use a book having three checks to the page t one with only one to the page.

Fig. 3 is an illustration of the stubs of three checks made properly in their order as they would appear in a three-check-to-page book.

Most check stubs, especially in books with one check to the p have a printed space for entering deposits.

Notice that in the illustration the deposit is entered on the in the vertical column to the right. In the same column are li the three checks drawn, and the total is deducted from the dep or balance in the bank, leaving a balance of $139.94 to be car over to the next page of stubs.

For ordinary purposes this is about all that is necessary to k to enable the average depositor to keep his bank account. Metl for checking up the account at the end of the month will be g later. Bank officials are always glad to instruct any one in mysteries of making out checks and deposit slips.

Paying Household Bills by Check.—First form the habi paying bills once a month instead of weekly, or with cash. V

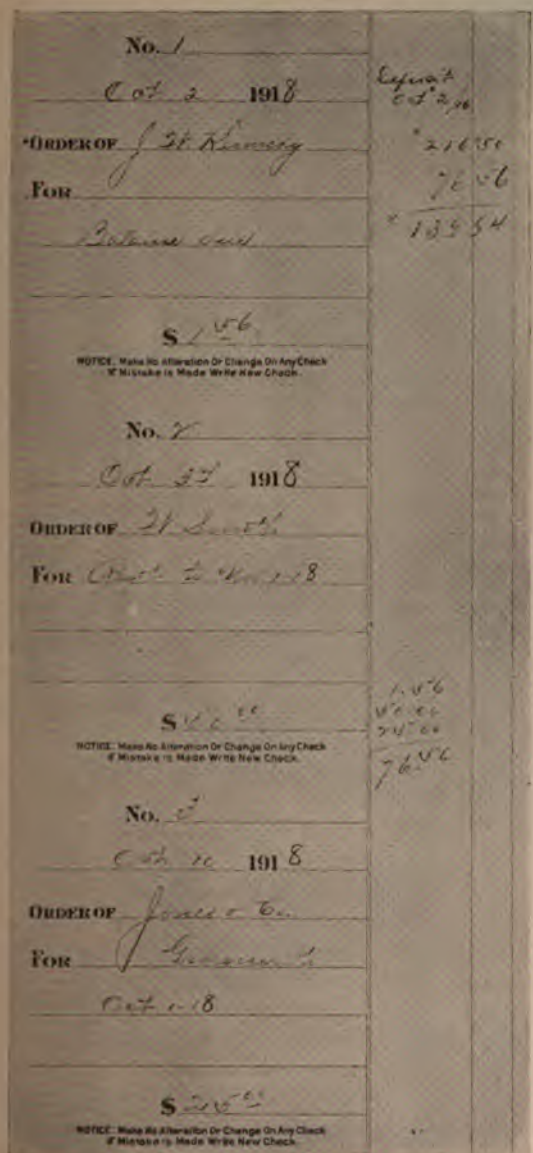


FIG. 3.—Stubs of checks made out properly

until all bills are in, which generally will be not later than the week of the month. For convenience, sort these bills alphabeti according to the names of the firms and individuals.

Every family, if at all possible, should possess some kind typewriter. Its value will be evident in many ways, especia there are young people in the family. The fact is mentione cause of its value in making out checks. It is no trifling matt draw thirty or more checks at a time with pen and ink.

Check the bills up and see if they are correct. Department bills especially should be scrutinized to see that credit has given for returned goods. If not, mark the item "Returned" deduct the amount from the bill.

Now find the number of the next check to be drawn fron stub in the check book.

On a sheet of paper in the typewriter or with a pen, list the as follows:

210	Ames & Co.	$21.05
211	Bacon & Ham	11.67
212	Carson, P. S. & Co.	20.55
213	Dawson, Jno.	1.00
214	Egg Dairy Co.	3.60
215	Field & Jones	11.10
216	Gaslight Co.	2.60
217	Harden & Law	25.00
	Total	$96.57

It will be noticed the checks are listed in numerical ord well as in alphabetical order.

Now tear from the check book, eight checks with which t these eight bills, if they are to be filled in on the typewriter. I in the machine a sheaf of three checks and fill in the amount, r number and date of each check. If a typewriter is not use checks can be filled in while still attached to the stubs. Dc however, fill in separate stubs for these checks.

Having made out the checks, trim the sheet of paper wit checks listed on it, paste the list upon the last stub, and deduc total from the balance. This saves making a separate entry o stub for each of these checks.

Now address envelopes for the bills, sign the checks and er them with the bills, ready for mailing or personal delivery.

Figs. 4 and 5 are two sample checks made out on the typewriter, one of them for an amount less than one dollar. Bankers do not like to have checks made payable for less than one dollar, but when they are made care should be taken to mark out all dollar signs.

Probable Number of Monthly Checks.—The family of average means will in time draw from fifteen to thirty checks a

EVANSTON, ILL. March 3rd. 1916 No. 134

The City National Bank, 70-114

OF EVANSTON, ILLINOIS.

PAY TO THE ORDER OF Dobson & Jones $ 25.67

Twenty five and 67-100 DOLLARS

PAYABLE THROUGH CHICAGO CLEARING HOUSE

FIG. 4.—Check made out on the typewriter

EVANSTON, ILL. March 3rd. 1916 No. 136

The City National Bank, 70-114

OF EVANSTON, ILLINOIS.

PAY TO THE ORDER OF John Smith & Co. XX .85 CTS.

ONLY Eighty-five CENTS

PAYABLE THROUGH CHICAGO CLEARING HOUSE

FIG. 5.—Correct way to make a check for an amount less than one dollar

month in payment of household bills. As nearly as possible all checks should be made out at the same time and once a month. Of course, there will be straggling bills coming in during the month, but tradesmen should be encouraged to render monthly bills. As already stated, a check can be drawn for "cash" once a week or twice a month, and from this cash, petty expenditures may be made. The cash expenditures can easily be entered as memoranda from day to day on one sheet of paper and, at the end of the month, entered in the account book.

The Budget Check System of Paying Bills.—A re novation in banking methods, of interest to the family tl its bills by check, is the "Budget check system." Fig. 6 sh check with its attached stub, and the budget items.

With this system, instead of drawing a check at the en month for each bill, one check is made out for the total an all monthly bills.

It will be seen that this check is made payable to the ba Attached to the check is a list of the principal merchant town. Opposite the proper names the customer writes in the due each firm or individual according to their several bills r These amounts are totalled, and the total represents the an the check.

The names of the ones to be paid, with the amounts entered on the stub, and the total, representing the amour check is deducted from the balance in the bank as usual.

The check with its attached budget is then turned into t and the amount of the check charged to the customer iss same.

If the ones to whom payment is to be made have an acco the bank, the amount due is credited to their accounts. a are notified of the same. If a firm has no account with the rangements are made with the bank to write in the nam creditor and the amount due, and then the bank mails a check to the firm in payment of the bill.

Such a system saves much time for the customer, but never take the place of a family budget, nor be substitut system of household accounting. No classification of expenc provided, so that it is merely a convenience in paying the bil end of the month.

Choosing Your Bank.—First, be sure that the bank wi you intend to do business is not a private bank. On the otl be sure that it is a State or National Bank or one under th vision of the State or Government inspectors. There a private banks that are sound and run by honest men; but are not usually under state or other supervision, there is al opportunity for dishonesty that generally is not discovered l late.

Second, if living in the suburbs, do not make the mi opening the family checking account with a large city bank

No. 267

Evanston, Ill., Oct 10th 1918

ANSTON TRUST & SAVINGS BANK

der of yourself $83.85

Eighty five and 00/100 DOLLARS,

to my account, crediting the items as per the list below:

Signature John Doe

No.

Dollars	Cents	Names	Dollars	Cents	Names	Dollars	Cents
		Hayes & Hayes			Pierson, Joseph F.		
		Hallman & Frederick			Postal Telegraph Co.		
		Haas, Phil.			Rutter, David & Co.		
		Harloff Bros.			Rosenberg's Dept. Store		
		Hoffman, James	25	00	Royal Dry Goods Store	7	75
		Huber, R.	7	75	Randlev, P. & Co.		
		Hinckley & Schmitt			Randlev, P. & Sons		
		Iredale, Geo. & Co.			Rhodin Bros.		
		Iredale Fireproof W. H.			Russell, W. H.		
		Johnson, A. F. & Co.			Rapp, P. G. & Bros.		
		Karger's Clothes Shop			Standard Oil Co.		
3	00	Kean & Howe			Shellberg, J. A. Decor. Co.		
		Kee & Chapell Dairy Co.			Schumer, M.		
		Kathryn Hat Shop			Stokes, E. T.		
		Kearney, G. A.			Reliance, The		
		Kadlec, Louise C.			Schimberg, P.	6	50
5	16	Lake Shore Creamery			Scheibe, G. C.		
		Lee, John V.			Streif, A.		
		Lord, W. S.			Suhr, H. J.		
10	00	Leffingwell, R. L.			Svedlund, W. P.		
		Lorimer, Robert			Samuelson, John		
		Lincolnwood Dairy			Theobold, A. A.		
		Macpherson, C. D.			Tyler-Leffingwell Co.		
		Morgan, C. H. & Co.			Triggs, C. W. & Co.		
3	75	Meisner, Jacob			Taylor, George		
		McCann Co., The			Torcom Bros.		
		Miller, Peter			Victor Pharmacy		
		Moore, A. H.			Van Deusen, A. S.		
		Mutual Laundry			Washington Garage		
5	70	McEnery, D. F.			Woods Electric Garage		
		McPherson, M. & Co.			Woman's Exchange		
		Mesrjian Bros.			Weiland, John		
		Metz, George	1	00	Weiland, M.		
		Northwestern Garage			Welter, N. K.	3	75
		North Shore Creamery			Westreicher, John		
		Neverman, E. A.			Winter, Geo. B.		
		North Shore Hardware Co.			Workers Co-op Mer. Co.		
		Nelson Bros. Laundry			Washington Laundry		
		Nelson, N. P.			Wieland Dairy Co.		
		North Shore Review			Walters & Anderson		
		O'Connell, W. J.			Western Union Tel. Co.		
		O'Malia, M. L.			Brought Forward	27	10
		Powers Ice Co.	3	75	" "	414	00
		Parker & Co.					
		Public Service Co.	7	50			
		Palace Cash Market					
		Parnham, F. J.					
		Pennsylvania Oil Co.					
47	10		44	00		638	85

amounts to firms or individuals as indicated above and charge the same to my account.

Signature John Doe

is a substantial State or National Bank in your suburb. Doing business with the smaller institution and the one in your immediate vicinity is more convenient. The smaller bank will be more anxious for your account, and it may be able and willing to show you courtesies that could not be extended by the larger institution.

Advantages of the Bank Account.—The possession of a bank account gives one standing and credit with every one who does business. Payment of bills by check is business-like and teaches one to be methodical and careful. It makes for efficiency, induces saving and prevents losses. When endorsed, checks are receipts

Fig. 7.—Counter Check

and are the best possible evidence that can be presented in court as proof of a payment.

A bank account helps to build up one's credit. In case of need one may be able to borrow from the bank as most business men do from time to time. This subject is discussed in the section on credit. There are so many advantages of keeping a bank account that one must first gain the experience before one can appreciate these advantages. Once tried, it will be hard to get one to go back to the old methods.

Bank Counter Checks.—Counter checks of different forms are used by bankers for the accommodation of customers who do not have their check-books with them or who have neglected to bring a blank check to the bank. One type is shown in Fig. 7.

In this case the check is made payable to the drawer who is also the drawee and it reads *"Pay to myself only"* and it is also marked *"Not negotiable"* that is, not transferable to another party. The

check is also marked "*and without any endorsement,*" so that drawer need not endorse the check. Had the check not been pri with the words "and without any endorsement" it would be ne sary for the drawer to sign it on the back.

It is a bad practice to use counter checks, as one is apt to fo to enter them on the stub of the check-book. Where special cou checks are not available, the bank provides ordinary checks for emergency use.

Certified Checks.—One takes a chance in accepting pers checks from strangers, as the recipient of the check may hav means of knowing whether the drawer of the check has that am of money in the bank. In order to obviate such difficulties *cert checks* are often used.

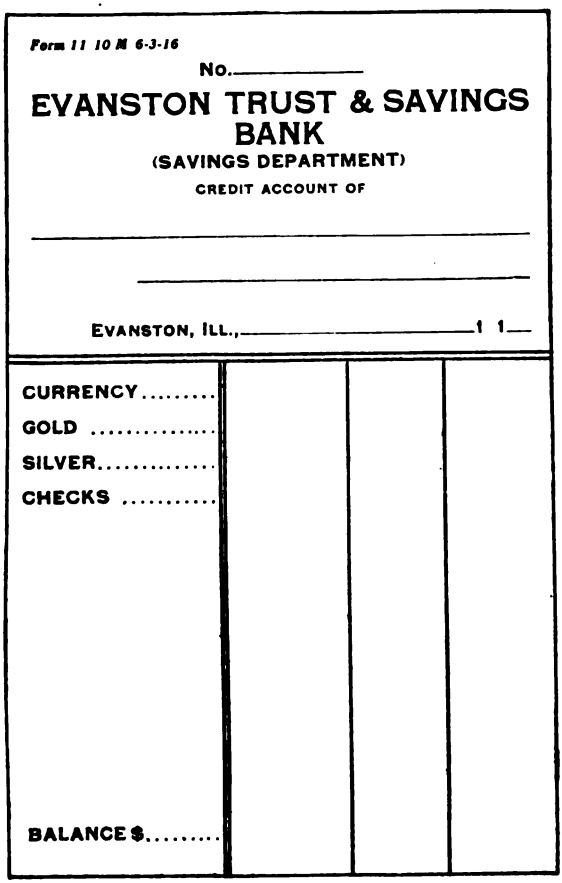
The customer makes out a check in the regular way and t it to the cashier of the bank and asks to have it certified. cashier satisfies himself that the customer has enough money in bank to pay the check, and then writes across the check or sta upon it the word "certified" and signs his name under it as Cas of the bank. The check is handed back to the customer who livers it as he sees best, but the Cashier immediately charges it tc customer's account instead of waiting until the check comes back payment.

A Bank Draft.—A bank draft is a bank's own check drawn u funds deposited to its credit with some other bank in some o city. An individual may not be known in another part of country; his credit there may not be established as it is in his h town, so that if he sends his individual check away from home it be questioned, and delays may occur due to the fact that it w have to be collected by the bank in the distant city. The expens making collections on personal checks varies.

On the other hand, a bank can very easily determine the cred another bank wherever it may be, and its checks or drafts, usu payable at some large city bank, are generally accepted wit question, anywhere in the country.

If one's personal check is "certified" (see above) by an of of a bank, it virtually assumes the status of a bank draft, as bank becomes responsible for the check's payment. Upon certi tion, the bank at once charges the amount to the customer's acc instead of waiting for its return through some customer or s other bank, as already explained.

If your personal check bears the printed words "Payable through the Chicago Clearing House" or "Payable through the New York Clearing House" exchange should not be charged by another bank for the collection of the check, as banks do not charge for the


Form 11 10 M 6-3-16

No._____

EVANSTON TRUST & SAVINGS BANK

(SAVINGS DEPARTMENT)

CREDIT ACCOUNT OF

_____

_____

EVANSTON, ILL.,_____1 1__

CURRENCY.....

GOLD .....

SILVER.....

CHECKS .....

BALANCE $.....

FIG. 8.—A Savings Bank deposit slip

collection of New York or Chicago exchange. Otherwise, if you do send your personal check away from home add at least ten cents to the amount of the check if it amounts to one hundred dollars or more, to cover the "exchange" charged by the bank for collecting it.

Visit your local bank. Examine the checks and deposit slips on the customer's counters and ask one of the clerks or officials to explain to you their purposes and uses. A bank account is the simplest method of keeping one's money and of keeping a record of household accounts. It furnishes the simplest system for paying one's bills, and it is by all means the safest and most business-like method of caring for one's finances.

Savings Bank Accounts.—In opening such an account, a deposit slip similar to the ones used in commercial banks is used, as shown in Fig. 8.

A Savings Bank Book is issued to the customer, and a number given to the book, the same number appearing on the deposit slip

Evanston, Ill., _____ 191

Received from the

Evanston Trust & Savings Bank

EVANSTON, ILL.
(SAVINGS DEPARTMENT)

_____ Dollars $_____

which amount has, in my presence, been charged on my Pass Book No._____

Balance, $_____

_____

Owner of Said Pass Book

FIG. 9.—Form of receipt signed upon receiving money from a savings account

with the name of the customer. The amount deposited is entered in the book. This book may be transferred to another party, with the account represented by it, but if the book is lost, the finder will be no more able or entitled to draw the funds that are in the bank to the credit of the customer than in the case of a regular commercial bank account.

In drawing money from a Savings Bank account, the pass-book must be presented at the bank, and a check in the form of a receipt similar to Fig. 9 is filled in and signed by the customer and delivered to the teller, who enters the amount upon the pass-book and returns it to the customer with the money called for by the check.

As stated elsewhere, savings bank interest is usually from 3½ to 4 per cent., and payable semi-annually, January and July first of each year.

Investments.—A bank is in a position to offer choice investments in bonds of every description drawing interest at 3 per cent. and up, compatible with safety. Investments are discussed elsewhere.

Safety Deposit Boxes.—A safety deposit box, that is, a small compartment in the vaults of a bank, can be rented for three dollars or more a year. Every family should have a place to deposit valuable papers; this may be a safe in the house, but the safe-deposit box in the bank is better.

Many banks are equipped for caring for silverware, expensive paintings, and works of art. Investigate the resources of your bank in these regards.

Estates and Trusteeships.—Although Trust Companies are especially authorized by law to act as trustees, executors and guardians, any bank is in a position to advise one in regard to the necessary steps to be taken in such emergencies.

Business Advice.—Make it a rule never to invest money or to loan it without first consulting your banker. There is no business problem about which your bank will not be glad to advise you. Adopt the slogan of every good banker—"Safety First"—and if you consult your bank before making any important business venture, you cannot go astray; in other words make your bank your silent partner, friend and adviser.

QUESTIONS

1. What is the difference between a savings bank account and a checking bank account?
2. Should one who only has a small amount of money open up a bank account?
3. What are some of the advantages of a bank account?
4. What is meant by "Currency"? What is a "Deposit slip"? What are the duties of "Receiving," and of a "Paying" teller?
5. How may a bank check be made to serve as a receipt?
6. What are the advantages of paying household bills by check?
7. Why should private banks be avoided?
8. What is meant by the "stub" of a check-book?
9. What is the difference between a check and a draft? What is meant by a check payable to bearer. What is an endorsement?
10. In making out a check what data or information should be listed upon the stub of the check?
11. Why is it especially necessary to check up the items in department store and similar bills?
12. What are the advantages of paying bills at the same time once a month?

PROBLEMS AND DEMONSTRATIONS

1. Procure a blank check of a commercial bank and make it out payab John Doe for thirty-five dollars and sixty-eight cents.
2. Make out such a check to the same party for ninety cents.
3. Procure a deposit slip from a commercial bank and fill it out fo following items:

Currency	$25.00	Express Order	$16.
Gold	20.00	Postoffice Order	5
Check on Philadelphia	26.45	Silver	5.

4. Demonstrate to the class the use of the Saving's Bank Book, deposit and method of checking out funds.
5. Ascertain if any bank in the community uses the budget-check sy and if so, secure a sample budget-check.
6. If possible secure blank check-book stubs for six checks but if t not possible, copy on paper the form used for check-book stub six checks, and make the following entries.

Deposits		Checks	
Jan. 2, 1918	$250.00	Jan. 2, 1918, John Smith (Grocer)	$25
Jan. 9, 1918	25.00	Jan. 2, 1918, Geo. Moore (Butcher)	7.
Jan. 9, 1918	25.00	Jan. 5, 1918, Myself (cash)	5
		Jan. 7, 1918, Jno. Doe (Jan. Rent)	25
		Jan. 8, 1918, Chas. Jones (Baker)	2
		Jan. 9, 1918, Jno. White (Laundry)	10

What is the balance in bank Jan. 10, 1918?

7. Make out a bank check payable to John Smith, and endorse the as John Smith payable to Mary Smith.
8. Endorse the check mentioned in Demonstration No. 1 payable to Doe, for deposit in some local bank in your community fo credit of John Doe, assuming that you intend to mail the de to the bank.
9. If John Doe was an agent for the Smith Company, and the check tioned in Demonstration No. 2 was in payment of a bill fro Smith Company, demonstrate how you would protect yourself suming that John Doe's name had already been written in the c
10. Find out from a local bank what are their rules for charging exch on checks.
11. Ascertain if the local bank or banks have safety deposit boxes, and the annual charge for the use of such a box.
12. Find out how much the local bank or banks charge for drafts of $1 or less; $500 and $1,000.

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CHAPTER V

CHECKING-UP A BANK ACCOUNT

CHECKING up a bank account is a very necessary process, but it is one that few people understand. It is also rather a difficult process until one becomes accustomed to it, but it is more difficult to explain it to another than to do it one's self. Banks are not infallible. It is possible for a bank to make a certain type of mistake that might not be discovered for several weeks or even months. For instance, a deposit might be credited to another customer and that customer might be away for several months, or perhaps like yourself he may not be in the habit of checking up his account at the end of each month. The bank's books would balance, therefore the bank would probably not discover its mistake before you or the other customer brought the error to its attention. If the other customer happened to be dishonest or careless, and if he should withdraw his money from the bank and leave the country, the bank would have a difficult matter either to find to whom they had credited this deposit, or if they did find it they would have trouble in recovering it. In any event, it would cause much annoyance for all concerned; hence the necessity for checking-up a bank account every month upon receipt of the bank's statement.

The first of each month most banks issue a statement for each customer showing the dates and amounts of all deposits made during the previous month and the dates and amounts of all checks cashed. The cancelled checks are delivered with this statement to the customer. Where the statement is not used the bank "writes-up" the customer's pass-book, entering therein the deposits and checks. In either event, the balance on hand the last day of the month is shown. Some banks balance an account only on request of the depositor, and so the statement is received at irregular intervals; but in the explanation herewith a balance at the first of the month is assumed.

In checking up your bank account, the first thing to do is to take the cancelled checks returned from the bank, and if you have numbered them, sort and arrange them in numerical order, the lowest numbered check being face up on top.

Now turn to the stubs of your check book, beginning with the first day of the previous month. These stubs are supposed to be

[illegible] each check wi[illegible] draw a large che[illegible] lay the check fa[illegible] compare the next [illegible] continue in the same w[illegible] of each stub for which you have a cancelled check. [illegible] the checks are not numbered, that they should be arranged [illegible] according to the date issued and compared with the stubs in the sa[illegible] way.

Having checked off all cancelled checks, turn back again to t[illegible] first stub of the previous month. On a blank sheet of paper, co[illegible] off the number and the amount of each stub *that has not be[illegible]* cancelled and paid off by the bank. This will show the checks isst[illegible] that have not been paid by the bank up to the first of the curr[illegible] month.

Now take the bank's statement and compare the deposits credi[illegible] there with the deposits entered on the stubs of the check-bo[illegible] Often bankers charge "exchange" on checks deposited and ded[illegible] the exchange from the deposit, so if the amount of the deposit [illegible] the statement does not agree with the entry on the stubs, mak[illegible] note of it on a blank piece of paper. Perhaps you have maile[illegible] deposit the last day of the month that did not reach the bank u[illegible] the first of the month. This would not appear on the statement [illegible] the month but will appear on the next month's statement. [illegible] you have probably added it to your balance on the stub of the che[illegible] and before the first of the month, there will be a discrepancy [illegible] your check-book and the bank statement. Make a note [illegible] the amount also.

The differences that may exist between a depositor's che[illegible] book stub and the statement of the bank, may be of the follow[illegible] nature:

First, checks previously drawn by the customer but not cash[illegible] by the bank until after the first of the month when the book [illegible] balanced.

Second, deposits entered on the check-book stubs that had [illegible] reached the bank at the time the statement was made.

Third, exchange deducted by the bank from deposits, not [illegible] from the deposit entry on the check-book stubs.

Fourth, items deducted from your account by the banker, such [illegible] interest charged, etc., not deducted on your check-book stu[illegible] similarly, items added by the bank, not added on your check-b[illegible] interest earned.

Fifth, mistakes in addition or subtraction on your check-book stubs, showing your balance in the bank to be either more or less than it should be according to the nature of the mistake made.

In addition to the discrepancies that may have been found in checking up the account, such as outstanding checks, deposits, exchange, interest and similar items, there are two other factors to be taken into consideration: First, the balance shown on your stub for the first of the month, and second, the balance in the bank shown by the bank statement of the same date.

Now comes the balancing of the account, that is, comparing the record according to your check-book stub, with that according to the bank's record in order to find exactly where you stand. By putting down the figures on a sheet of paper with an explanation as to what each means, most people can readily work out for themselves an answer to this question,—How can the balance shown by the check stub be reconciled with that shown by the bank's statement; so that, if an error has been made in either record, it can be detected. It is done practically by finding a series of items in the two accounts, the sum of which two series is the same amount;—that is, the two accounts must be made to balance.

Just what is done in reconciling can be shown by an example. We will suppose that the check-up has revealed the following facts:

First, balance first of month shown by check-book stub.....$269.83
Second, balance first of month shown by bank statement..... 267.42
Third, outstanding checks not paid by bank up to first of month. 147.89
Fourth, exchange charged by bank, not yet subtracted by me on stub ..... .10
Fifth, deposit sent in mail but not yet entered in books at bank. 150.00
Sixth, mistake made by me on stub, making balance less by.... .20

Let us analyze these according to the following processes:

As Shown by the Stub of the Check-Book:

The following factors are involved:

First, my balance the first of the month.

Second, items added on my check-book but not yet added on the bank's statement, such as a deposit sent through the mails and not received by the bank before the first of the month.

Third, items subtracted from my check-book stub but not yet subtracted at the bank, such as checks issued but not yet presented to the bank for payment.

As Shown by the Bank Statement:

First, balance first of the month as shown by bank statement.

Second, items subtracted from my account at the bank, but not yet subtracted on my check-book, such as exchange charged by the bank; or the difference in a deposit correctly entered by the bank as $13, but by my error entered in my check-book as $13.20.

Third, items added on the bank statement but not yet added on the check-book, such as interest earned.

With this formula before us, let us take the figures given and see if we can balance the account for the month.

The Check-Book.

Balance first of month as shown by stub	$269.83
Outstanding checks not paid by bank up to the first of month	147.89
	$417.72

The Bank Statement.

Balance first of month, as shown by bank statement	$267.42
Deposit entered on stubs, but not yet entered by bank	150.00
Exchange charged by bank, deducted from the deposit, not subtracted by me on stubs of check-book	.10
Mistake in adding stubs, which when corrected would make my balance less	.20
	$417.72

It will now be seen that these figures have been made to balance, but in order to correct the mistakes made, it will be necessary to correct the check-book stubs as follows:

The exchange not deducted from the stubs, and the mistake in addition totalling 30 cents, should now be deducted from the balance on the last stub used. The $150 deposit will take care of itself, as it will appear on the next bank statement.

Listing Outstanding Checks.—Having balanced the account, copy on the back of the last sheet of stubs used, the statement as shown above. Now list the number and amounts of all outstanding checks. Next month in checking up your account some of these checks will have been paid, in which case it will be necessary to check them off. If any are still outstanding they will be carried over from month to month in the same way until they are paid. These checks must by no means be checked off on their original stubs, but from the list as tabulated. Otherwise the checks of one month would become confused with those of subsequent months.

Although these things seem perplexing to beginners, a little practice will overcome any difficulty in balancing the account at the end of the month.

Fig. 10 is a printed form used by one bank, which is printed on the back of the customer's monthly statement as an aid to checking up the account as rendered by the bank at the end of the month.

The form makes no provision for the customer's mistakes in

RECONCILEMENT

BALANCE FROM CHECK BOOK	$		
OUTSTANDING CHECKS			
NO.			
TOTAL	$		

DEPOSITS NOT CREDITED (IF ANY) . . $_____

BANK BALANCE AS PER STATEMENT . . . . . $_____

TOTAL $_____

TO PROVE BALANCE AS SHOWN ON STATEMENT

LIST YOUR BALANCE FROM CHECK BOOK IN SPACE PROVIDED ABOVE, SORT CHECKS NUMERICALLY OR BY DATE.

LIST ABOVE ALL CHECKS NOT RETURNED WITH STATEMENT COMPARING THE CHECKS RETURNED WITH CHECK BOOK STUBS.

IF ALL DEPOSITS HAVE BEEN CREDITED, THE TOTAL SHOULD AGREE WITH STATEMENT.

IF ANY DEPOSITS HAVE NOT BEEN CREDITED ON STATEMENT ADD THESE TO BALANCE SHOWN BY STATEMENT AND TOTAL SHOULD AGREE WITH OTHER TOTAL.

FIG. 10.—An aid to checking up your bank account

addition or subtraction when entering deposits and checks the stubs of the check-book; for failure to enter either chec deposits upon the stubs; for deposits mailed to the bank v have not yet reached it, nor for charges made by the bank, a exchange. This form is helpful, but the record it calls for may to be supplemented in the ways indicated in order to eff reconcilement of the accounts.

QUESTIONS.

1. Why should one check up his bank account?
2. How often do banks usually send the customer a statement account?
3. What is meant by "cancelled checks"? What is a personal check? a check made payable to "bearer" need to be endorsed?
4. What factors may cause a difference between one's bank balai shown on the stub of one's check-book, and as shown on the statement?
5. What would you do if you made a deposit in the bank and did no your bank book with you?
6. What is the purpose of the bank book?
7. What is meant by "outstanding checks"?
8. How should they be listed after checking up the bank account?

PROBLEMS AND DEMONSTRATIONS

1. If possible secure a "cancelled" check, (one that has been paid bank). Explain the same and the endorsements, if any.
2. If possible secure the monthly statement of a bank to a custom explain it.
3. Ask some member of your family having a bank account to allo to try and check it up at the end of the month when the bank ha in its statement, or if you have a bank account of your own onstrate your ability to check it up at the end of the month.
4. Make a statement, balancing the following bank account with th tomer's check-book:

Customer's balance Jan. 1st	$546.75
Deposit made by customer Dec. 29th, not entered at bank in December	50.00
Exchange charged by bank on a check deposited not subtracted on customer's stub	.10
Mistake in addition made by customer on stubs, which made his account on his check-book to be more than that shown by the bank by a difference of	10.00
Outstanding checks not paid by bank up to December 31st	45.26
Balance as shown by the bank Jan. 1st	531.91

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CHAPTER VI

HOUSEHOLD ACCOUNTS

An expense account frightens most housekeepers. Many newly-married couples at first adopt some system of keeping an account of expenses, but it often becomes burdensome and is soon discontinued. This is sometimes because of the systems used and because most people have the wrong conception of the purpose of such an account. If, however, they will keep a faithful record of expenditures for a year, adjusting their budget during that period, systematic habits of economy will be established that will reduce the household accounting to a minimum. It has even been proved to be a fascinating privilege.

The importance of keeping an account of family expenditures cannot be overestimated, provided it is used to control expenditure. This real purpose of account-keeping has been entirely overlooked, and this is why nearly all the printed forms made for the purpose have proved impractical.

Why Most Household Expense Accounts are Impractical.—First: Because the prime purpose seems to have been to keep a record of every penny and every dollar expended.

Of course such an account is kept for the sake of accounting for the family income, but this should not be the principal purpose. The constant worry of trying to remember what one did with "that thirty cents" or how to account for "that dollar" throwing the balance short, becomes a bugbear. The time necessary to account for every penny and to balance accounts is worth more than the amount itself.

Second: Those who have no knowledge of bookkeeping dislike to try to "keep books" or to "balance an account."

Third: There has been no standard of measurement governing family expenditures. The needs of one family are different from those of almost any other. For this reason, there has been no standard expense book that even approximately fitted the needs of any one family.

One man owns his own home, so that his problems are different from those that confront the renter. One man lives in a house and

another lives in an apartment. One owns an automobile and the other does not. One maintains servants and the other does not. So the problems are different for every family and therefore the "cut-and-dried" conventional family expense book suits no one.

The Real Principle That Should Govern.—The first thing to do is to banish from one's mind all thought of the necessity for keeping an account of every penny expended. The second thing to do is to forget about balancing accounts. Of course, one may take the time and energy necessary to keep a record of every penny and the account may be balanced, if desired, but this is not the real purpose of an expense account in the home. Unaccounted sums should simply be charged off to some such account as "Miscellaneous" or "Unaccounted for."

The real household expense account should be a Household Ledger and the principles underlying it should embrace the following:

First.—A ledger account, that is, a separate account should be kept for every important division of household expenditure, as Rent, Clothing, Fuel, Food Supply, etc. From this account, one should be able to tell from week to week, or month to month, exactly how much is being spent for such a period for any particular item, so that a comparison may be made from time to time with previous weeks or months.

As an illustration, it is very desirable to see on one page, just how much fuel has been purchased during any previous month during the year; or, to compare last month's bill with that of the same month last year. *In this way a check may be kept upon such expenditures as show an abnormal increase.*

Second.—It is desirable to know from an expense record the exact date a payment was made.

Third.—Such a record properly kept would show dates of purchase, making it easy to place a present value on any important object such as a piece of furniture, a picture or a rug, and thus estimate its value in case of loss by fire. Such a record shows the approximate life of an article of clothing. To the children, this especially might be helpful, and prove a guide in future purchasing. The numbers of the checks drawn to pay bills may be recorded, thus giving instant access to the check itself.

Fourth.—An expense system, to be successful and practical, should be adaptable to the needs of every family. It should be

HOUSEHOLD LEDGER SHEET — Food Supply — Page No. ____

3	4	5	6	7	8	9
Groceries and Tea	AMOUNT	Meat & Fish	AMOUNT	Dairy Milk & Cream	AMOUNT	TOTAL AMOUNT
Jones & Co.	14 3 9	Brown's	6 3 6	New Dairy Co.	2 4 1	
Smith & Sons	16 7 0					
Olsen & Co.	3 6 0					
Total for Mo.	34 17	Total for Mo.	6 3 6	Total for Mo.	2 4 1	43 0 1
Jones & Co.	20 0 4	Brown's	8 7 8	New Dairy Co.	2 7 9	
Smith & Sons	15 6 6					
Total for Mo.	35 7 0	Total for Mo.	15 7 8	Total for Mo.	7 7 9	44 14 4
Jones & Co.	17 6 4	Brown's	6 0 3	New Dairy Co.	2 1 0	
Smith & Sons	18 7 1					
Total for Mo.	41 13 5	Total for Mo.	6 8 2	Total for Mo.	3 1 0	50 9 7
Jones & Co.	20 1 0	Brown's	7 1 0	New Dairy Co.	2 6 9	
Smith & Sons	15 2 5					
Total for Mo.	35 3 5	Total for Mo.	7 1 0	Total for Mo.	2 6 9	45 1 4
Jones & Co.	21 1 1	Brown's	6 4 0	New Dairy Co.	2 4 8	
Smith & Co.	16 1 5					
Total for Mo.	37 2 6	Total for Mo.	6 4 0	Total for Mo.	2 4 8	46 1 0
Jones & Co.	18 7 0	Brown's	9 1 5	New Dairy Co.	2 6 9	
Smith & Sons	21 3 4					
Total for Mo.	39 5 4	Total for Mo.	9 1 5	Total for Mo.	TOTAL 2 6 9	48 0 9
				Total of previous six months		297 3 9
				Total for the Year		

FIG. 11.—Household ledger sheet

flexible, so that it might be enlarged from time to time, to meet the growing needs, or decreased in size when certain types of expenditures are no longer needed. It should provide for both weekly and monthly entries. It should provide for at least a year's record to a sheet, or six months to a page, so that the entire year's record of any account may be found in one place. It should make possible a separate account with each important type of expenditure.

Such a record may be made by anyone in a properly ruled book, when opposite pages may be used, but loose leaf sheets already printed for the purpose are now on the market. They can be kept in an inexpensive binder, arranged in alphabetical order. Fig. 11 is a sample page of such a sheet, filled out, showing the expenditures for "Food Supply" during a six-month period; the reverse of the sheet would give the record for the next six months, thus placing a whole year's record of each important heading on a single sheet.

It will be noticed that the entire page of the sample sheet is given over to "Food Supply" but that this subject is divided into three subheads, columns 3, 5 and 7, and that these subjects consist of Groceries and Ice, Meat and Fish, and Dairy Products. It is not necessary to so divide the subject of "Food Supply" unless desired. If meat and fish are bought of a combined market, they can go under the one head of "Groceries." Butter can also be so charged unless one wishes to make the distinction mentioned. In fact, any classification may be used.

In the same way, every page is arranged for the division of the main subject into three subtopics, or accounts.

Each page is so ruled that each month has five spaces, or one for each week, so that if necessary, weekly payments may be recorded. The entries in the ledger may therefore be made at the end of each week, or may be made during the month as checks are drawn.

The average family will not use more than fifteen to eighteen pages, or accounts. For those who have a more extended need than this, on another page of this chapter will be found a list of headings that may be used, together with appropriate subheads.

Following the pages used for expenditure, a page should be devoted to a summary for each month of the year. This summary, for instance, should show the total expenditure for each month, for each subject. Any blank sheet can be used for the purpose, but printed forms are available. As an illustration, the

summary sheet totals, copied from the previous pages, might show the following (Fig. 12):

SUMMARY FOR THE YEAR 191...

EXPENDITURES

ITEM OF EXPENSE	Jan.	Feb.	Mch.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Automobile													
Books, etc.	1.50		5.00			10.00	2.00	1.15	3.35			7.00	30.00
Coal Account		2.50		10.00					5.00		3.50		21.00
Clothing	25.00		30.00	50.00	10.00	5.00	10.00		25.00	50.00	10.00	30.00	163.00
Education													
Fuel	10.00	15.00	10.00	5.00					10.00	10.00	15.00	15.00	90.00
Food Supply	30.00	25.00	35.00	25.00	33.00	32.00	25.00	30.00	25.00	30.00	35.00	40.00	355.00
Furniture, etc.													
Gas & Electricity	3.50	5.00	2.50	3.50	3.00	2.50	2.50	3.50	3.50	4.00	4.00	4.50	41.00
Laundry, etc.	7.50	5.00	3.50	3.50	5.00	7.50	6.00	4.50	5.50	6.50	7.50	7.00	70.00
Medical			25.00				10.00						35.00
Personal													
Rent	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	240.00
Savings	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	120.00
Transportation	3.00	3.00	2.50	2.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	36.00
Taxes													
Unaccounted for													
Miscellaneous													
Cash Expenditure													
TOTAL	110.50	85.50	116.50	195.00	84.00	90.00	88.50	61.15	110.35	88.50	108.00	127.50	1200.00

RECEIPTS

ITEM	Jan.	Feb.	Mch.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Salary	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	900.00
Extra work	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	300.00
TOTAL	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	1200.

RESUME

Total Income for the Year from All Sources..... $ 1200.

Total Expenditures for the Year..... $ 1200.

Balance on Hand First of Year..... $

$

Fig. 12.—Summary of total for Fig. 11

The figures given in the yearly summary are for illustrative purposes only, in order to show how the summary should be filled in. They do not in any sense represent a standard budget.

The total income for the year should exceed the total expend tures, and in that case in the "Résumé" at the foot of the pag a "Balance on Hand First of the Year" would be shown.

The monthly total expense, it will be noted, sometimes exceed the monthly income; how to care for such excess expenditures explained under Budget Checks, page 28.

It should be remembered that the principal purpose of such a account is to know what it is costing for any particular division household necessities. "Am I paying too much for rent in pr portion to the amount being spent for clothing? Is the foo supply running too high as compared with previous months? A the gas and electric and fuel bills normal? How do taxes compa this year with last year's assessment? Am I extravagant in n laundry? Do I pay too much for carfares and so lack exerci and increase doctor's bills?" Such are the questions that are vit in the economics of the home and the proper kind of an expen record will help you to answer such questions.

SUGGESTIVE HEADINGS AND SUBHEADINGS FOR A FAMILY HOUSEHOLD LEDGER

Automobile

Subheads.—Original Investment and Replacements; Repai and Extras; Gas and Oil; Garage; Chauffeur; License and Insu ance; Depreciation.

Beneficiaries

Subheads.—If relatives are being supported the record shou be kept under this heading, and the names may be used for su heads; or, Allowance; Clothing and Board may be used as subhead

Books and Periodicals

Subheads.—Books, Periodicals.

Civic Activities: Church and Charity

Subheads.—Pew; Pledges; Missionary; Sunday School; Soci ties; Collection; Hospital; Settlement; Special Funds; Charity.

Civic Activities: Clubs, Lodges, Etc.

Subheads.—A page may be kept for each organization if d sired. Dues, etc.; Fees; Accounts.

Clothing

This account may be kept in two ways, either with individuals or according to the character of the clothing.

Subheads.—Father; Mother; Children; or John; Mary; Jane, etc.; or, Outerwear; Underwear; Hats and Shoes, etc.

Education

This account may also be kept with individuals, giving a page to each one with appropriate subheads, or each subhead may take the name of the individual.

Subheads.—John; Charles; Mary; or, Books and Supplies; Transportation; Lunches and Spreads; Extras; Tuition; Fees: Room; Board.

Fuel

Subheads.—Coal and Wood; Gas; Janitor and Labor. (See also Illumination.)

Food Supply

Subheads.—Groceries and Ice; Meat and Fish; Dairy Products; that is, by dealers' accounts; or the record may be kept by kinds of foods—Meat Foods, Milk and Cream, Cereals, Fruits and Vegetables, Fats, Sweets, Food Accessories.

Furniture and Upkeep

Subheads.—Furniture; Carpets and Rugs; Linens; China and Glass; Kitchenware; Art and Pictures; Repairs; Miscellaneous.

Garden and Lawn

Subheads.—Trees and Shrubs; Seeds and Plants; Dirt and Fertilizers; Tools and Supplies; Labor.

Gifts

Subheads.—Birthdays; Holidays; Weddings; Anniversaries and Deaths; or Father; Mother; Children; Friends.

House Repairs

Subheads.—Payments on House (see Partial Payments or Investments); Carpenter and Mason; Plumber; Decorator and Painter; Material and Supplies; Miscellaneous.

Individuals

Accounts in the name of individual members of the family may be kept as necessary.

Subheads.—Name; Name; Name.

Investments and Savings

Subheads.—Bank; Loans; Bonds; Mortgages; Old Age Fund; Real Estate; Miscellaneous.

Insurance: Life

Subheads.—Life; Health; Accident.

Insurance: Fire

Subheads.—Building; Personal Property; Miscellaneous.

Illumination, Etc.

As gas for cooking is not usually separated from gas for lighting, both have been included under "Illumination."

Subheads.—Gas; Electricity; Oil; Fixtures; Bulbs; Miscellaneous.

Laundry and Cleaning

Subheads.—Steam Laundry; Washer Woman and Laundry Supplies; Cleaning and Pressing.

Medical

Subheads.—Doctors or Practitioners; Nurses; Dentist; Oculist; Drugs and Supplies; Hospital.

Music

Lessons may be included under Education or under this heading.

Subheads.—Piano, Phonograph; Music Rolls; Records; Sheet Music; Miscellaneous.

Old Age Fund

This may be kept separate, or under Investments and Savings.

Personal

This may include personal indulgence and personal service.

Subheads.—Hairdresser; Manicure; Barber; Tobacco; Liquor; Flowers; Candy; Theaters; Entertainments; Miscellaneous.

Partial Payments

A page may be given to this subject which embraces the payment of debts, a record of payments on a house, a lot or a bond, etc.

Subheads.—As suggested.

Postage and Stationery

Subheads.—Postage; Stationery.

Rent

Subheads.—None necessary unless rent is being paid on more than one place.

Recreation

Some of the subheads under "Personal" may be included here instead, if desired. In addition the following are suggested:

Subheads.—Concerts and Dances Trips; Vacation; Miscellaneous.

Savings

Subheads.—As necessary.

Service

Subheads.—Maids; Nursemaid; Governess; Cook; Butler; Chauffeur; Valet; Gardener; Tutor; Janitor; Dressmaker (or more usually under Clothing); Extra.

Transportation

Subheads.—Commutation; Street Cars; Boats; Railroad; Taxi; Livery.

Taxes

Subheads.—Real Estate; Personal Property; Federal Income; State Income; Water Tax; Wheel Tax; Dog Tax; Licenses.

Unaccounted for and Miscellaneous

All miscellaneous expenses and money unaccounted for may be entered under this heading.

It is, of course, understood that no one family would have use for all of the headings and subheads suggested. Certain subheads are grouped under more than one general heading, permitting personal choice. This list is only suggestive, but it will give one an idea of the classification of household expenditures. It is flexible, so one can adapt it to one's needs. Other methods will suggest themselves to any one who uses the system.

Receipts.—All the sources from which money is received would constitute a list of "Money Received." They would be of such a nature as the following:

Salary or Wages; Rents; Interest from Bank; Interest on Mortgages; Dividends from Stocks; Interest on Bonds; Payments on Loans; Payments on Property Purchased; Income Bequests; Gifts; Miscellaneous; Sales.

A little practice will soon make one familiar with the system suggested. If mistakes are made, it merely means that perhaps one sheet is spoiled and not an entire book. It is understood that each family writes in its own headings to suit its own needs. Many questions will arise from time to time but in a short while the user will be able to simplify his accounting and reduce the headings to a minimum.

Any family who will use such a system faithfully for one entire year will not dispense with it, for it will meet many needs.

Using the System.—As suggested in a previous chapter, all household bills should be paid monthly, and by check; not by cash, and if possible not even weekly. As soon as all bills are in, before drawing checks in payment of them, after they are listed in alphabetical order, enter the amounts in the Household Ledger under the headings selected. In case of bills, as those from Department Stores, which may include clothing, groceries, furniture and other articles on a single bill, it will of course be necessary to pick out the different items from the bills and foot them up, entering the total for each type of expenditure under the proper head.

Handling Cash Accounts.—From the foregoing, it will be seen that the principle upon which household accounts should be based, is that of a system which will show at the end of the month exactly how much has been expended for each important item in the budget. Such a system naturally will depend upon the weekly or monthly bills from the various tradesmen. These amounts are to be copied at the end of the week or month, under the proper headings. This, however, does not provide for the cash expenditure, which obtains from day to day.

A good way to take care of cash expenditures is to secure a blank book and rule the pages vertically into columns, placing at the top of each column the heading to be used. Following is a ruled page given as a suggestion:

If it is desired, the amount of money in cash drawn each week or month, may be entered in the first column. If expenditures are made from day to day, the amounts should be jotted down, preferably in pencil, under the proper heading A daily total of cash spent

RECORD OF CASH EXPENDITURES FOR THE MONTH OF JANUARY

	Cash record	Food supply	Carfare	Children	Lunches	Amusements	Churches	Clubs, etc.	Miscellaneous		Total daily
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

RECORD OF CASH EXPENDITURES FOR THE MONTH OF JANUARY—*Continued*

	Cash record	Food supply	Carfare	Children	Lunches	Amusements	Churches	Clubs, etc.	Miscellaneous		Total daily cash spent
25											
26											
27											
28											
29											
30											
31											
Total											

Each total should be transferred to its proper page and column in the Household Ledger at the end of the month and entered as "Cash Expenditure."

may be entered in the last column if desired At the end of the month the total for each item should be made at the foot of the column and this total should be transferred to the proper heading in the permanent Household Ledger. Not many headings would be necessary, as it is supposed that most expenditures will be paid by check at the end of the month. Such records as cash paid for fruit and vegetables from peddlers, carfare, lunches, amusements, church collections, and incidentals would probably be the ones most used. They can be distributed at the end of the month in the Household Ledger where they belong.

It should be understood that this Cash Book is to be used as a temporary expedient, and not as a permanent record. It should not be necessary to enter details, or specify the nature of expenditures recorded in the Cash Book; amounts expended, classified under the proper headings, are all that one ordinarily should be concerned with in the use of the Cash Book. At times, however, it may be very desirable to study the quantities and kinds of goods purchased, as in the case of food, or clothing.

It is easy to make a cash record with a column for such entries, or other methods may be employed as suggested below.

There are numerous other systems of keeping household accounts but most of them are based upon regular bookkeeping methods and are more confusing to the average woman who has no training in bookkeeping, than is the system given in this chapter. With a simple form for entering daily cash expenditures without details, such as suggested, combined with the household ledger in which weekly or monthly entries may be made, together with the final monthly and yearly summary, nothing further is required in the way of household accounts.

Food Accounts.—Some have suggested that detailed records be kept of food expenditures, at least for a period, in order to check up the amounts of different kinds of food used. As an illustration, a certain amount of meat-like food or protein is required daily. Protein is the most expensive form of food and it represents a class of food with which many families are very wasteful. If the protein foods can be recorded daily and apart from other kinds of food material, a check may be kept upon undue expenditures for it—so for other kinds of food. For instance, experts are urging that in any family food budget as much should be spent for milk as for meat.

Any such system must be kept in detail and requires more work, perhaps, than the average housewife can or will give to it permanently. Such a system does not take the place of household accounting and the Household Ledger. It does, however, have a very decided value in the study of the food problem, and for those who will use it, even temporarily, it serves a valuable purpose. This form of record may also be used for other household expenditures apart from food, but the main feature is the opportunity presented of classifying food expenditures according to definite types of food material, such as the following:

Meat and meat-like foods—important for protein: Meat, fish, eggs, nuts, peas, beans, cheese, lentils.

Milk: Important for protein and for so-called "vitamines" or body-regulating substances, and for mineral salts.

Cereal or grain foods—representing the carbohydrates: Meal, rice, flour, breads, cereals, macaroni, crackers.

Representing the fats: Oil, lard, bacon, butter, butterine, salt pork, etc.

Fruits, vegetables: Important for the mineral salts and for the so-called "vitamines."

Representing the sweets and also carbohydrates: Candy, sugar, honey, molasses, sirup, etc.

Representing stimulants and condiments: Tea, salts, coffee, spices.

As the basis for a study of food this system is excellent, and i should be considered more carefully in connection with the chapte on food in the budget.

The Household Ledger form given on Page 43 can be readi adapted to a classified food record, as shown in Fig. 13.

Keeping Personal Expenses.—There are many unmarri men, as well as wage-earning women, whose home is a boardi

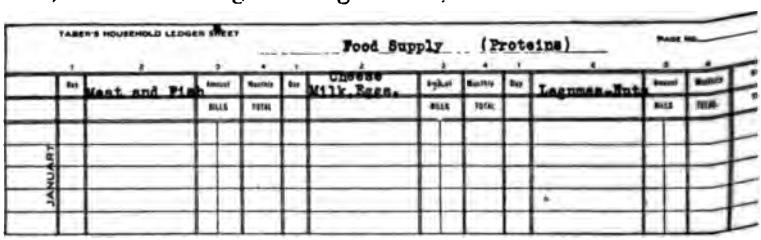

FIG. 13.—Classified food record

place. Even though such persons live with parents or other rela tives, they are not directly interested in the expenses of the hom itself. They are, however, interested in their own personal expense from the point of view of a wise use of money, and of increasin their savings.

There are several expense records on the market which provide for a monthly statement of personal expenses with a monthly summary. One of these records, intended for men, is given in Fig 15. Each page represents a day, and the books contain thirty-on pages for the month and daily expenditures; and appropriat monthly summary pages are given.

A Cash Record.—A reproduction of a page from a recor published by the American Home Economic Association [1] is shown It shows the suggested food divisions together with the other famil expenditures, making a complete daily cash account, Figs. 15–1

[1] Thrift by Household Accounting, *Journal of Home Economics*, Balt more, Md., 25 cents.

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1 TRANSPORTATION				Totals
Railr'ad	St. Car	Boat	Cab	

2 ROOM			BOARD		
From	To	Amt	From	To	Amt

Break.	Lunch	Dinner	Extra

Guest

3 ROOM ACCESSORIES			
Furnish	Linen	Light	Heat

4 LAUNDRY			
Laun'ry	Press.	Clean.	Mend.

5 PHYSICAL			
Doctor	Dentist	Nurse	Occul'st

Manic'e	Massag.	Barber	Bath

Toilet A. Phys. Cul.

6 RECREATION			
Theatre	Movies	Enter.	Games

Picnic	Trip	Spreads	Miscel

7 EDUCATION			
Tuition	Subject	Lecture	Suppli's

Books	Magaz.	Fees	Miscl.

ORGANIZATIONS 8				Total
Church	Charity	Club	Ass'an	

FINANCE 9			
Bank	Insur.	Loans	Invest.

Taxes	Rents	Dts Pd.	Interest

POSTAGE, ETC. 10			
Stamps	Stat'ry	Stenog.	Phone

Teleg.	Express	Dray	Tips

CLOTHING 11			
	Amt.		Amt.
Coats		Shoes	
Collars		Vests	
Haberd'ry		Underw'ar	
Neckwear		Jewelry	
Overcoat		Hose	
Sweater		Hats	
Suit		Miscel.	

MISCELLANEOUS 12			
	Amt.		Amt.
Candy, etc		Losses	
Drugs		Tobacco	
Flowers		Liquor	
Gifts		Vacations	

FIG. 14.—Summary of personal expenses

CASH RECORD

House			Food				
Rent, or house payments, taxes, house repairs			Meat, fish, eggs, milk, cheese, nuts, lentils, dried beans and peas			Fruit and vegetables	
TOTAL			TOTAL			TOTAL	
Fuel, light, laundry and cleaning supplies, ice			Flour, meal, rice, macaroni, breakfast food cereals, bread, crackers			Butter, butterine, oil, lard, bacon, salt pork, etc.	
TOTAL			TOTAL			TOTAL	
House furnishings			Sugar, sirup, honey, molasses, candy, etc.			Tea, coffee, salt, spices, etc.	
TOTAL			TOTAL			TOTAL	

FIG. 15.—Suggested food division together with other family expenditu —to be read with Fig. 16, opposite. From "Thrift by Household Accou ing."

DURING WEEK BEGINNING_____

PERSONAL (clothing, car fare, lunch, health, recreation, education, insurance, etc.)

Name_____		Name_____		Name_____	
TOTAL		TOTAL		TOTAL	
Name_____		Name_____		Name_____	
TOTAL		TOTAL		TOTAL	

SUMMARY

CASH FOR USE		CASH USED		CASH LEFT OVER	
On hand at beginning of week		Total weekly expenses		Total cash for use	
Received from					
_____		Paid on back debts		Total cash used	
_____					
_____		Saved			
TOTAL		TOTAL		Cash on hand at end of week	

FIG. 16.—Family personal expenses and summary—to be read with Fig. 15, opposite. In addition, a page of weekly summaries brings together all these totals at the end of each week

QUESTIONS

1. Why are most household expense accounts impractical?
2. What are the principles that should underly an expense account for the home?
3. What are the advantages of keeping such an account?
4. What is meant by a "Household Ledger?"
5. In keeping an expense account, what information should each entry show?
6. How would you handle daily cash paid out?
7. What is the purpose of classifying food expenditures according to food values?
8. In making such a classification what would be the principal food headings to be used.
9. Could this system of classification be followed in the household ledger system?
10. Should one keep a small personal expense record of individual expenditures?

PROBLEMS AND DEMONSTRATIONS

1. Make a list of the various types of expenditures in your own home, such as Rent, Food, Clothing, etc.
2. As far as practical, divide these expenditures into proper headings and subdivide each main heading into three or more subheads.
3. Make a list of headings for "Money Received" according to the sources of income for your family.
4. Ascertain what system of household accounting, if any, is used in your family.
5. Make a statement showing the amount of your family gas bill for each month during the past year, if possible.
6. Compare the family expenditure for coal for two winter seasons, if the figures are available.
7. If possible procure an expense book of the type explained in the previous chapter, or make one yourself by dividing the pages of a small ledger. Open in this book a separate account, with each item of expense used by your family, placing the proper headings and subheadings for each account at the top of the proper pages.
8. If possible, secure the consent of your parents to keep in this book a monthly record of all family expenses, beginning with the first of the coming month.
9. Make out the headings and subjects for a Yearly Summary Page.
10. If you handle money during a week or month plan a record for this, keep it conscientiously and note the effect upon you.

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CHAPTER VII

THE APPORTIONMENT OF INCOME THROUGH THE FAMILY BUDGET

A BUDGET system, or the planning in advance for expenditures in proportion to income, is a mystery to most households. Expenditures are not planned—they just happen. There are weeks and months of lean days followed by similar periods of fat days. Christmas and holiday expenditures, sickness, accidents and misfortune lessen the days of plenty and add to the general worry of the wage-earner.

Expenditure.—Writers upon household economics have divided family expenditures into "Necessities" and those that contribute to the "Higher Life."

There can be no fixed classification, however, any more than there is a fixed standard of living for everyone. The luxuries of a past generation seem to be the necessities of a succeeding generation and it is the experience of America that standards of living are constantly rising.

One's economic position is a determining factor in the matter of clothing as well as in fixing one's social status. The clothing of the factory worker is different from that of the office-clerk. The nurse, the policeman, the soldier, the trainman and all those whose occupation calls for a uniform, find an entirely different problem confronting them in the matter of attire from the ordinary person in civil life.

By the term "Necessities" one is not merely to consider that which makes existence possible, but that which makes life bearable and comfortable. There are certain fixed items of expenditure that are common to all persons. These consist of such things as rent or shelter, food, clothing, and heat and light which often are classified under fuel as a part of operation or upkeep. Necessities though these items are, they represent expenditures in which extravagance may exist.

If a family rents a house or an apartment that exceeds the

roportion of income that should be expended for that purpose, such n excess of rent becomes a luxury that should not be afforded; *unless there can be a corresponding decrease in some other item of expenditure,* in which case the excess rent may be considered as a contribution to the "Higher Life," in that it provides a better environment, or a more tolerable living condition than that hitherto enjoyed.

division of income into "Necessities" and expenditures that o the "Higher Life" is a good one, because it teaches er our expenditures that the income may not be spent nere bread and meat. The finances of the family should so as to leave a sufficient margin for those things which tribute to culture, education, enjoyment, the develop- mind and the growth of the soul.

fted musician, music is as much a necessity as carpets the ordinary housewife. The more important things ot "meat and drink" nor clothing; but they are the spirit. Emphasis, therefore, must be placed upon the gs which we style "necessities," because careful man- ich expenditures makes it possible for us to have more tributes to the Higher Life, or "The Joy of Living."

es.—The writer would classify the "Necessities" as

NECESSITIES

(a) *Shelter:*
1. Rent, or, (2).
2. Interest, Taxes, Upkeep, and Insurance.
3. Transportation to work, since rents vary with location.
4. Necessary Furniture and Furnishings.
5. Fuel.
6. Illumination.
7. Operating expenses, that is, replacement of utensils, supplies of soap, etc.

(b) *Food:*
1. Groceries.
2. Meat and Fish.
3. Dairy Products.
4. Ice.

Sometimes classified as—
1. Meat and Meat Substitutes.
2. Fruits and Vegetables
3. Flour and Cereals.
4. Fats.
5. Sweets.
6. Ice.
7. Miscellaneous.

(e) *Clothing:*
1. Suits, dresses, etc.
2. Underclothing.
3. Over-clothing, wraps, cloaks, sweaters, capes, etc.
4. Hats, shoes and gloves.
5. Accessories, as collars, ties, etc.
6. Laundry, cleaning, pressing and repairing.

It must be remembered that the term "Necessities" is not used in its restricted sense. A number of items in the above list may not be real necessities to every person; but if these items are included in the budget, they should be classified as "Necessities."

Higher Life.—Under this heading should be included all that contributes to culture, education and recreation; to wider social and civic activities; and to safeguarding physical health and financial security. It may seem strange to classify such expenditures as those for the doctor, the nurse and the dentist under Higher Life, but it is customary to do so. Under this division may be included the following:

HIGHER LIFE

(a) *Insurance:*
1. Life.
2. Health.
3. Accident.

(b) *Saving:*
1. Investments.
2. Competency for old age.

(c) *Physical:*
1. Doctor.
2. Dentist.
3. Oculist.
4. Nurse.
5. Medicine.
6. Professional services, manicure, hair dresser, etc.
7. Recreation.

(d) *Domestic Activities:*
1. Service in the home.
2. Entertaining.
3. Telephone.

(e) *Civic Activities:*
1. Political organizations.
2. Clubs, Sororities and Fraternities.
3. Lodges, civic and business organizations.

(f) *Philanthropic Activities:*
1. Charities.
2. Beneficiaries. (Care of relatives and others.)

(g) *Religious Activities:*
1. Church and Church organizations.
2. Missionary Work.
3. Y. M. C. A., Y. W. C. A., and similar organizations.

(*h*) *Culture:*
1. Books and Periodicals.
2. Music, piano players, phonographs, etc.
3. Art.
4. Drama.
5. Travel.

(*i*) *Education:*
1. Schools. (Public and Private).
2. Special instruction.
3. Physical education.

(*j*) *Luxuries:*
1. Amusements.
2. Personal indulgences.
3. Automobiles, motor boats, etc.
4. Extras and excess expenditures. (All expenditures for rent, above a reasonable amount and for furniture and furnishings and other goods not actual necessities.)

(*k*) *Gifts.*

Many of these items have been mentioned simply to outline the proper division of expenditures, not because every one, or even many, will use all of this classification.

Percentage Apportionment of Income.—Some economists have proposed more or less definite apportionment of the income on a percentage basis. For instance, they say that the rent should not exceed 25 per cent. of the monthly income. One such classification, according to the percentage basis, the origin of which is unknown, is the following:

	Per cent.
Food	30
Clothing	13
Rent of house	25
Housekeeping expenses	12
Education	6
Luxuries	4
All other expenses	10
Total	100

Another estimate according to the two classifications of "Necessities" and "Higher Life" already mentioned, is the following

Necessities	Per cent.
Rent	20
Food	25
Clothing	20
Operating Expenses	15
Total	80
Higher Life	20
Total	100

Ellen H. Richards in 1899 gave the following ideal budget for four adults or for two adults and two or three children as follows:

	Per cent.
Food	25
Rent	20
Clothing	15
Operating Expenses	15
Higher Life	25

Sheaffer gives his budgets for families of four or five made up of two adults and three children under sixteen years of age as follows:

Income	Food Per cent.	Rent Per cent.	Operating expenses Per cent.	Clothing Per cent.	Higher life Per cent.
$1500 to $4000	25	20	15	20	20
$1000 to $1500	30	20	15	20	15
$800 to $1000	35	20	15	15	15
$500 to $800	35	15	15	15	10
Under $500	60	15	10	10	5

It will be seen that these estimates differ. The point to b brought out in this connection is that all such arbitrary percentag estimates are often absurdly misunderstood. They are subject t qualification and limitation, and can be used only in the most gener way as a guide to the proper division of the family income. On may readily see that, if 25 per cent. of an income of $300 a mont was apportioned for rent *for two people,* the amount allowed for thi item of expenditure would, under ordinary conditions, be more tha sufficient.

Again, "Rent" when applied to apartments usually includ water tax, and often heat, continuous hot-water and janitor servic while in the rental of a house such items are usually paid f separately by the tenant.

Engel's Laws.—The result of investigations by Ernst Eng in Europe (1857) in regard to workingmen's expenditures led hi to believe that as the workingman's income increases the percenta of the income spent for food decreases; the percentages spent f rent, for clothing, for fuel and light remain practically unchange while the percentage for higher life, including education, healt comforts, etc., increases as the income increases.

Engel's principles have recently been restated for Americ conditions by Streightoff as follows:

the income increases (from $500 to $1200):—
The proportionate expenditure for food
(a) decreases for the country at large from 50 per cent. to 37 per cent., but
(b) in New York City, it amounts to almost 45 per cent. of the total outlay until an income of $1000 is attained.
There is a strong tendency for the percentage of expenditure for clothing to increase (from 12 per cent. to 15 per cent.).
Relative expenditures for housing
(a) remain about constant for the country at large, (at about 18 per cent.), but
(b) decrease rapidly from 30 per cent., or more, to 16 per cent. in New York City.
Proportionate expenditures for fuel and light decrease (from about 6 per cent. to 4 per cent.).
Expenditure for culture wants increases absolutely and relatively[1] (from 16 per cent. to 25 per cent. for the country at large; from 11 per cent. to 19 per cent. for New York City).

Factors to be Considered in Apportioning the Income.—re can be no standard, fixed basis for the division of the family me applicable to all families, since families vary in the condis that determine expenditure.

For the above reason, one should not depend entirely upon pubed estimates in percentages. In determining the proper apporment for the two divisions already mentioned, "Necessities" "Higher Life" the following factors, among others, must be n into consideration:

(a) *Number in Family:* 1. Number of adults. 2. Number of dren. 3. Number of employees.

(b) *Physical Condition:* 1. Health. 2. Sickness. 3. Special sical conditions.

(c) *Shelter:* 1. House. 2. Apartment—heated. 3. Apartment nheated.

(d) *Environment:* 1. In city. 2. In suburbs of city. 3. In small . 4. In town or village. 5. In University town. 6. On farm.

(e) *Transportation:* 1. Necessary to go to school. 2. Necessary o to work. 3. Necessary to go to church. 4. Necessary to go to rket.

The physical condition of some member of the family might e life in an apartment impossible. Children might make a home suburb, even at a greater expense, the best possible kind of an tment. Adults require more food than small children; laboring

[1] The Standard of Living, F. G. Streightoff.

men need more than sedentary workers. So in studying this problem, each family is a unit that cannot be compared with another family unless the conditions are the same.

The Budget System.—This consists of estimating one's expenditures and then apportioning the income during a definite portion of time, such as a week, a month or a year, so that there will be no lean periods, and so that the income may be distributed evenly over the specific period in a way that will allow a balance for the "higher things" of life, as well as a sufficiency for all necessities.

This cannot be done by taking the weekly or monthly income as a standard of measurement, although of course, in the end, expenditures cannot be more than the income, but the standard of measurement must be the average weekly or monthly expenditure for the entire year. Household bills vary from month to month. In some months they amount to fifty dollars, other months will show a record of one hundred dollars' outgo. Fall and spring months call for expenditures for clothing to meet changing seasons; expenditures that are not apt to come at other times of the year. The haphazard method finds the approach of these months with no funds on hand to meet these and other seasonal demands.

Before a budget can be made as it should be, it is necessary to have some kind of a record of expenditures upon which to base the budget. This proves the value of the proper kind of household accounts. One must know about what it has been costing for clothing, for food, shelter and other items of household expense covering a period of at least a month under normal conditions. With the figures as a basis, the income is then apportioned to cover all necessary needs for the next month. Perhaps too much is being spent upon the table and not enough upon the clothing; perhaps too much is being allowed for rent. If so, the new budget will be able to correct such mistakes. A past month's account can be made the basis for the following month's budget, and so on until a fair definite standard of expenditures has been determined upon.

Apportionments.—Some have said that the various items of household expense bear a definite percentage relationship, one to the other, and that that relationship may be fixed as a standard for these particular expenditures. The danger of depending upon such percentage estimates has already been referred to; it is due to the fact that definite percentages are allowed for items of ba

penditures, such as rent, food and clothing, regardless of the conditions that determine costs, such as the number in family, and city rsus country life. In a given city, for instance, there is a minimum rental at which either habitable houses or apartments in spectable neighborhoods may be secured, and this must be a fixed xpenditure in the budget.

Under given conditions, there is a minimum expenditure absolutely necessary to sustain life; likewise, there is a minimum expenliture necessary to maintain respectability and self-respect. The ame is as true for the farm family as it is for the city family.

Budgets Based Upon Minimum Necessities.—An attempt has been made to give a few typical budgets, that as nearly as possible approximate conditions as they really exist in a large city, and which include the varying factors involved. Similar budgets may be made for farm conditions. These budgets are not based upon percentages, but upon income in relation to actual conditions, and the apportionments are expressed in terms of even dollars. The factors considered are the following:

First.—Income: $1200, $2400, $3600.

Second.—Family: 2, 3, 4, 5 persons.

Third.—Housing: In a heated or unheated apartment.

Fourth.—Pre-war economic condition.

These four budgets make allowances for incomes of $1200, $2400 and $3600 with various sized families of two adults, and families with one, two and three children, living in heated apartments.

Relative Costs.—The total expense of course increases with the number in the family, but the items do not increase by simple multiplication. The costs for children are relatively less than for the adult members, and for a second and third child less than for the first child.

Food for three does not cost half as much again as for two people; for there is more waste per capita and less opportunity for economy in buying and in utilizing with two than with a larger number of persons.

Clothing is made over or utilized more completely in the family with children than in the adult family.

Housing accommodation and accordingly rent will have to be increased with increase of family, so for three in a family this may cost more than for two; a second child will probably increase it

since boys and girls are to have separate rooms; but a thi
need not increase housing cost. A family of five adult
not have an equal possibility of "doubling up."

MONTHLY BUDGETS FOR HEATED APARTMENTS IN
(*Estimated for* 1916)

Budget No. 1.—Income: $1200 per year or $100 per month

Necessities	2 persons	3 persons	4 persons
Food	$ 24	$ 30	$ 36
Rent	25	30	30
Clothes	12	15	18
Operating expense	6	6	6
Total necessities	67	81	90
Higher life including savings	33	19	10
Total	$100	$100	$100

Budget No. 2.—Income: $2400 per year or $200 per month

Necessities	2 persons	3 persons	4 persons
Food	$ 35	$ 40	$ 50
Rent	35	40	45
Clothes	18	20	25
Operating expense	20	22	25
Total necessities	108	122	145
Higher life including savings	92	78	55
Total	$200	$200	$200

Budget No. 3.—Income: $3600 per year or $300 per month

Necessities	2 persons	3 persons	4 persons
Food	$ 40	$ 45	$ 55
Rent	40	45	55
Clothes	24	30	36
Operating expense	25	25	30
Total necessities	129	145	176
Higher life including savings	171	155	124
Total	$300	$300	$300

Operating expense, which includes gas, electricity, telep
housekeeping expenses, such as wages, soap, supplies, ute
the like, will not vary much with size of family; althoug
vary with size of income. In these heated apartment budg
ating expense does not of course have to include heat, w
or the cost of heating water. In none of the budgets is a
employed worker provided. Only part-time help, as occasi
necessary, is allowed.

The "Higher Life" item in the budget is to include exp

necessities such as care of health, including a reasonable amount for recreation, expenses for education, for newspapers, magazines and the like, and also whatever personal expenditures may have to be provided for. In this item, too, is included savings.

It is obvious that there are elastic expenditures which will grow rapidly with increase of income, provided expenditures for "necessities" such as food, clothing, shelter and service are held down toward minimum necessities. One fundamental point in all the budgets suggested above is that it is possible to organize one's expenditures so that the necessities are allowed a sufficiency, and as income grows, are kept toward a reasonable minimum, so that there is an increasing margin for cultural life and for savings.

Relation of Cost to Increasing Income.—In examining these budgets many may think that if an income increases from $1200 to $3600 a year, more increase should be allowed than has been given for the necessities of life. The mistake many families make when their income increases is to raise the standard of living too rapidly in respect to necessities. More food than is needed is provided; a greater variety and more expensive kinds of foods are indulged in. More elaborate living quarters are rented and very much more may be spent for clothing. This is entirely wrong in theory. As shown, Engel's principles allow a decreasing per cent. for food as income grows, while cultural wants claim an increasing per cent. of the family budget.

The minimum living requirements should be maintained until more of the higher things of life have been provided for, and until a goodly start is made on a savings account or a competency for old age. After a reasonable reserve has been built up for emergencies and for things of the higher life, more may then be apportioned for so-called "necessities." If forty dollars, with good management, will provide plenty of nourishing and satisfying food when living upon a twelve hundred dollar a year income, why double this expenditure the moment the income has been doubled? We need no more physically than we did before. Some increased food expense at the twenty-four hundred dollar level may be permissible, but surely the large increase allowed in budget No. 2 is a maximum. One must guard lest the additional sum spent upon the table be merely for the satisfaction of the palate.

The real difficulty comes in making the budget for the smaller incomes. The budgets given are for the minimum requisites at the

1916 high prices. Heated quarters cheaper than for $35 a month may be obtained in the large cities, but as a rule not in new buildings. Rents that fall below $25 to $30 a month usually mean unheated apartments, and the expense of heating falling upon the tenant would add very materially to the cost of rent. Four rooms heated may of course be available in some cities and in small towns for such a figure.

MONTHLY BUDGETS FOR HOUSES HEATED BY TENANTS

Budget No. 4.—Income: $1200 per year or $100 per month

Necessities	2 persons	3 persons	4 persons	5 persons
Food	$ 24	$ 30	$ 36	$ 42
Rent	20	20	25	25
Clothes	12	15	18	18
Operating expense	10	10	10	10
Total necessities	66	75	89	95
Higher life including savings	34	25	11	5
Total	$100	$100	$100	$100

Budget No. 5.—Income: $2400 per year or $200 per month

Necessities	2 persons	3 persons	4 persons	5 persons
Food	$ 35	$ 40	$ 50	$ 60
Rent	25	30	35	35
Clothes	18	20	25	30
Operating expense	26	28	32	32
Total necessities	104	118	142	157
Higher life including savings	96	82	58	43
Total	$200	$200	$200	$200

Budget No. 6.—Income: $3600 per year or $300 per month

Necessities	2 persons	3 persons	4 persons	5 persons
Food	$ 35	$ 45	$ 55	$ 65
Rent	30	35	40	45
Clothes	24	30	36	42
Operating expense	32	32	37	37
Total necessities	121	142	168	189
Higher life including savings	179	158	132	111
Total	$300	$300	$300	$300

A comparison of these budgets for families in unheated house with those in heated apartments shows the first difference of cours in the rent item, which is considerably less for a house than for a apartment with corresponding accommodations. As the housin costs less, there are corresponding increases in Operating Expens

for the fuel for heating the house, for the water tax, and for the cost of heating water. Another offset for the cheaper rent of the house is the cost of caring for grounds and sidewalks. On the other hand, the house, provided there be a garden attached, may reduce food cost by $50 to $75 a year. It has not seemed best to show all these possibilities in the budgets for houses but to base the budgets for families in houses upon the following assumptions:

The cost for food and for clothing will be the same for these families as for those living in heated apartments. (There may be differences—garden, social demands, entertaining, etc.)

The rent of the unheated house will be considerably less than for the heated apartment occupied by the same family.

There will be a corresponding increase in Operating Expense because of extra fuel cost, and water tax especially; but possibly also because of hired service, although members of the family may make the latter adjustment without extra expense. The increase in the operating expenses in houses over the operating expenses in apartments has been assumed to be not quite equal to the saving in rent on the house as compared with the apartment. With budgets emphasizing thrift and savings this may very well be true; many families moving from apartments to houses show, however, an increased cost for living in a house due often to the fact that such a family would take a house much larger than the apartment which they were willing to put up with. Other expenses also sometimes come with the house to increase living costs. (See also page 110.)

There will be, therefore, a slightly larger margin for the Higher Life item, including savings, in the budgets for families in houses.

Farm Home Budgets.—The farm home budget will include the same items that have been considered. Thus there will be Rent or its equivalent, and clothing; there will be Food; but the larger part of this will be produced, not bought outright. Some farm families account for the cost of food bought, and reckon that produced as the difference between the real cost of production and what it would have cost if purchased. The cost of production becomes then an item in the farm operation, not that of the home, while the better living which probably results is not reduced to a money basis.

There will be Operating Expenses of heat, light and service, etc., although the fuel and water may be a local supply and the service cost slight.

While it may be more difficult to frame a standard budget for

the farm home than for these others, the principles of the budget system are equally fundamental and its advantages should be studied.

Applying the Budget System.—It is assumed that a Bank Account has been opened, that all family bills are now being paid by check, once a month; that a practical system of household accounting has been adopted; and that an estimate of the family needs for six months at least, if not an entire year, has been made and that the average per month has been struck for the various expenditures to be made during the coming year.

If all this has been done, all that is necessary is to see that the monthly expenditure for each item does not exceed the amount allowed. If forty dollars has been decided upon for the table, the housekeeper should see that no more than that sum is spent. A memorandum may be kept on a sheet of paper tacked on the kitchen wall. Slips issued by merchants with every purchase can easily be entered on such a sheet. All that is necessary is to enter the total of each slip in pencil. In this way one can always tell how the bills are running, and if they are going to run too high, some little luxury can be given up to insure the average.

Carrying Over Budget Items.—This subject is touched upon in the chapter on "Saving," but it should be emphasized here in applying the budget system. If the expenditures for any item in the budget do not amount to that which is allowed, after drawing all checks to pay current bills, list on a piece of paper the amount left to the credit of each account. As an illustration suppose the first column following represents the amounts allowed in the budget, the second the amounts of the bills for the month, and the third the balance left to the credit of that account:

	Monthly Budget	Amount of Month's Bills	Balance on Hand for These Items
Groceries, etc.	$30.00	$25.00	$ 5.00
Clothing	25.00	15.00	10.00
Insurance	15.00	0.00	15.00
			$30.00

Here we have thirty dollars not expended at the end of the month. Next month there may be $20 left over, or perhaps $5, and so every month perhaps there may be some amount unexpended. For instance, we must lay aside something every month for insurance and for clothing to meet heavy seasonal demands. There are

two ways to care for this situation. The first is to draw one check for the total amount left to the credit of all funds. Do not sign the check, but deduct it from your balance as shown on the stub, and then hold the check. A better way, however, is to take such expenditures as savings, insurance, clothing, fuel, etc., and draw a separate check *for each one of these items,* each month, for the balance left to the credit of each account, and then hold the unsigned checks.

When the time comes to pay insurance premiums, one might have six unsigned checks of $10 each. Add on the stub of the check-book the amount of each of these checks to your balance and destroy the checks. List on the stub the numbers of the checks, and also mark "cancelled" opposite these checks in the list of "outstanding checks" entered on the stub the last time you checked up your bank account. These checks will not again be listed in checking up the bank account the first of the month. Now draw a check in the regular way for the full amount of your insurance premium payable to the Insurance Company. If, after paying the insurance premium, there is still a balance to the credit of this fund, draw a check for the amount, and hold it as usual. Savings checks can be held in the same way. If desired, all such checks can be listed on a memorandum sheet in the expense record.

This is very easily accomplished, and although difficult to describe is in practice very simple indeed. If the budget and household ledger system is persistently kept, it will soon be found indispensable, and the drawing of unsigned checks for budget sums in reserve will be found one helpful feature of it.

Keeping Apportionment Checks.—In following the budget or apportionment system on a bank account basis, it will soon be found that a number of checks will always be on hand awaiting future expenditures. As an illustration, money is accumulating in the Fuel Fund during the summer months, and if $15 a month is being allowed for this apportionment, there will be a check issued for this amount, and held for every month when no expenditures are being made for this account. It is possible to have on hand a number of checks for Fuel; others for Clothing; others for Savings; for Insurance, etc., etc. These checks of course are being held unsigned, although deducted from the check-book balance.

The best way to care for these apportionment checks is to file them alphabetically in a small envelope file or case procurable at any stationery store. All the clothing checks would be under

"C," the Fuel checks under "F," etc. As needed, one or more or all of them may be removed from the file when they are to be used.

Keeping a Record of Apportionment Checks.—It might be well to rule a page in a blank book on which to keep a record of apportionment checks being held. Such a page might be ruled as follows:

APPORTIONMENT CHECKS RESERVED DURING YEAR 19—

Item	Jan. Amt.	Feb. Amt.	March Amt.	Apr. Amt.	May. Amt.	June. Amt.	July. Amt.	Aug. Amt.	Sept. Amt.	Oct. Amt.	Nov. Amt.	D Ar
Fuel	..	..	..	..	..	$15	$15	$15	$15	..	..	
Clothing	$10	..	$10	$10	..	10	10	..	10	$10	..	
Medical	5	..	..	5	..	5	5	5	5	5	$5	
Insurance	10	..	10	10	..	10	10	10	10	10	10	
Interest	..	..	15	15	15	15	..	15	15	15	15	
Taxes	5	..	5	5	..	5	5	5	5	5	5	
Savings	20	..	20	20	..	20	20	20	20	20	20	

Such a record is only intended to serve from month to month that one can see at a glance just what apportionment checks are hand. As they are used for some purpose, they are marked on the record. Months in which payments occur would probal show no budget check issued for the item involved. For instan interest falls due in January and July, so that it is probable th the accumulated funds together with the apportionment for Jan ary and July would be spent immediately to pay the matured int est, so budget checks for those months for this item would not issued.

QUESTIONS

1. What is meant by the term "Higher Life"? Name the items of Fam Expenditures usually classified under this heading; under Nece ties. What items under "Higher Life" might really be classified necessities?
2. What might be considered "Luxuries" for an average family?
3. What does shelter include? Under what heading would you clas "Ice"? Transportation"? Why?
4. Why is a percentage apportionment of income misleading? What fac should be considered in making an apportionment of the fan income? In what way might these factors change an apportionme
5. What percentage of income is generally allowed for "Rent", for "Fo for "Clothing", for Higher Life as a whole, for Necessities a whole? What are Engel's laws?
6. What is meant by a "budget"? Upon what must a budget be based? a budget what items of expenditure are more or less fixed, and subject to much deviation?
7. What difference must be considered in making budgets for apartr dwellers and for those living in houses?

8. If the fuel for the winter cost $180.00, how would you apportion this sum in the budget? How would you handle the money apportioned during the year for fuel?
9. What are the principal advantages of the budget system?

PROBLEMS AND DEMONSTRATIONS

1. Take a list of expenditures in your own family, and classify these types of expenditures, under the two headings, "Necessities" and "Higher Life." Subdivide the headings under "Necessities" into the three subdivisions and the headings under "Higher Life" into the ten headings given in this chapter, providing expenditures in your family embrace all of these items. Make a tabulation showing the percentage spent for "Necessities" and for "Higher Life" and for their subdivisions. These figures are for your personal use and need not be submitted to the class or the teacher unless desired.
2. If the necessary figures are available, find out how much per person, per month it is costing your family for food.
3. Make a budget for a family of two having a salary of $1200 per year, based upon a heated apartment.
4. On $900.00 a year.
5. On $1800.00 a year for a family of five.
6. On $2400.00 a year for five adults.
7. On $3600.00 a year for five adults.
8. Make similar budgets based upon a house.
9. Make a budget to suit the conditions, needs and income of your own family.

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CHAPTER VIII

FINANCING THE FAMILY

EVERY family should as soon as possible form well-decided policies regarding the business of the home. In fact, as outlined in previous chapters, the attitude of the family toward all the great problems of life should be formed as early as possible. The fundamental questions of religion and man's relation to God and to the agencies that represent the world's religious thought need a clear analysis in the mind of every parent or prospective parent early in matrimonial life, if not before. The relation of the family to society and its duty to one's fellow-men, and to the nation at large, demand a definite statement in the minds of every one. Religion, patriotism and duty need to be more than merely assumed. In the thought and life of every individual these terms and what they stand for need to be defined by one's attitude and expressed in one's life.

In a somewhat similar manner, although the needs of the family are assumed and although the hope and faith exists that the future will care for all such needs, more than this is demanded of every family.

In the organization of a business firm or corporation well-defined methods are adopted for financing the prospective concern. The law must be complied with; articles of partnership or incorporation drawn up; officers elected and capital raised.

The Family a Co-operative Institution.—The family should be assumed to be a co-operative organization to which every member contributes something. Just what that something is for each member of the family, adult or child, should be fully understood. Every member can contribute something to the common good. The younger children may contribute their share of the family work and the adult children who are earning should contribute their proportionate share of the expense of the family.

Adult Children.—Theoretically, if board, room and washing cost a young man or woman, say $6.50 a week, that sum at least should be contributed to the upkeep of the family, if the working son or daughter lives at home. It is true that most parents, who are able, wish to save their children from any expense possible, if they

at home; but despite this fact both parents and children should gnize their economic duty in such matters. There can be no parison between life at home and life in a boarding-house even he same actual cost.

Children who are self-sustaining and living at home should not ive the first lessons of a parasite within the family circle. The ng man or woman in such a position, who spends his or her entire ome upon his or her own needs and pleasures without contributing to his or her own support, or without assisting in the work the home, is as much of a parasite as one who professionally erves that appellation.

As children become self-supporting while still at home, they ould be taken into the confidence of the parents and the mysteries the family budget should at least be in part explained to them. ey can be easily shown the advantages of living at home as compared with life in a boarding-house. They can figure for themselves at it would cost to pay for a room and for board and washing tside of the home. The expense of maintaining such a home as ey have been accustomed to should be shown, and then, if they oose to remain at home with the parents and enjoy the larger mforts that come from home life, they should be willing to ntribute their share toward the maintenance of that life.

Children's Share of Family Expenses.—Such a share need not arrived at by dividing the total family expense by the number in e family, as that would not be fair; but a minimum charge should arrived at by considering the cost of three factors in the budget: nt, food and laundry.

As explained in the chapter on Service, the rent of an extra om for a maid in the cities means about $10 per month, and so, by having a son or daughter remain at home requires an extra om, this charge might be made. The food supply of the family y be reckoned as $12 per month per person. Laundry, if hired e, for a family of four will cost about $12 per month, or $3 per son. These figures then show the amount that might reasonably sked from a self-supporting son or daughter.

Room per month	$10.00 or per week	$2.50
Board per month	12.00 or per week	3.00
Laundry per month	3.00 or per week	.75
Extras per month	1.00 or per week	.25
Total	$26.00	6.50

This is a minimum charge and there are many other small ite of expense that might justly be included that would make amount for "extras" much higher. Of course, it is assum that the son or daughter is earning enough to pay for their o clothes, for car-fare, lunches and incidental expenses, over a above the items mentioned. It is difficult to reduce family relatic to figures in dollars and cents, and no effort should be made to so, but young people should become economically independent as so as they become self-sustaining, for right-minded young people w not continue financially dependent upon parents a day long than necessary.

Children should strive to reduce the weight of the load carri by parents, and endeavor to make the family what it should a purely co-operative institution, recognizing that the more each able to contribute the better will be the home surroundings. Wh two or three self-sustaining young people pool their interests wi those of father and mother a much more desirable home may maintained than would be possible were the burden left entir to the parents, or were the children to choose to leave home f life in a boarding house.

The Budget the First Step in Financing the Home.—T subject has been discussed in previous chapters, but it is mentior here simply because there can be no sound plan for financing t family until some kind of a budget system has been adopted, a until a proper system of household accounting has been devised.

Wages and Salaries.—All expenses connected with the upk of the home and with the support of the family should be defra from the wage or salary earned by the individual members of t family. There are a few fortunate families who have their inco augmented by gifts; by money inherited; by interest acquired capital invested; by rents on property owned; by royalties patents and copyrights and from other sources outside of wa and salaries. *Income from such sources should not be expen for actual living expenses.* Money secured in this way should conserved for savings or for cultural needs, or for such items might be classified under "Higher Life." At the best, such ad tions to the income are liable to fluctuate or stop altogether, s it is generally understood that a man should earn through his o labors in the form of a wage or salary, sufficient to support him and family.

Indebtedness.—As stated in the section on Credit, if misfortune causes indebtedness, the family should not rely upon the local tradesmen to bear this burden, but credit should be established with the local bank and a sufficient sum should be borrowed from the bank to pay all existing debts.

If the seeming necessities of the family equal the income, expenditures must be cut down or one's earning capacity must be increased. If this cannot be done, then the debt should be amortized;[1] that is, one should determine the limit of reduction the family expenditures will allow, and the sum saved by such reduction should be continued for a sufficient number of months to pay the interest and principal of the debt at the bank.

Banks usually loan money for thirty, sixty, ninety and sometimes one hundred and twenty days. If payment is made upon a note when due, the bank is usually willing to renew the balance of the loan for another similar period. If then the budget is modified so as to allow for the reduction and extinguishment of the debt, it need not remain as a burden.

Purchasing Real Estate and Building.—Vacant property usually can be purchased by paying a certain sum in cash and giving the seller a mortgage on the property for the balance. A thousand-dollar lot, for instance, might be purchased for $250 cash and a mortgage for $750. The purchaser, of course, would have interest and taxes to pay and other expenses connected with the title. The mortgage note $750, together with interest and taxes, may be paid on the amortization plan as explained in the chapter on Institutions for Saving and Investment (p. 336).

One should be careful about investing in vacant property as usually such property is not the source of any income. If, however, one can purchase a lot for cash, or clear it of incumbrance, then one generally can manage to borrow sufficient money to build, and as soon as a building is erected, the owner has an income from which interest and other expenses may be paid.

If one wished to purchase a house and lot, together worth $7500, or to purchase the lot and build the house, it might be done on an initial payment of $2000 or even less. From four thousand to forty-five hundred dollars might be borrowed on the property, and a second mortgage for the balance be given to the seller or contractor as follows:

[1] See page 336

Cash	$2000.00
1st Mortgage	4000.00
2nd Mortgage	1500.00
Total	$7500.00

Such a house might bring $75 a month rent or $900 a year, and this amount should be applied on the second mortgage. If the owner lives in the house, he should pay that sum as rent and apply it in the same way. Out of his salary, sufficient also should be saved to pay the taxes and interest on the first mortgage until such a time as the second mortgage has been paid off. When that has been accomplished the $75 allowed as rent should apply on the first mortgage, until it has been reduced to a more reasonable amount, or until the interest on the remaining indebtedness, plus taxes and upkeep, make a reasonable rent.

If the indebtedness was reduced to $3000 the interest at 5½ per cent. would amount to $165 a year and added to the following expenses would make a very reasonable rent:

Interest $3,000 at 5½ per cent. per year	$165.00
Taxes, estimated at 1⅔ per cent. of the full value	125.00
Insurance ($10) and upkeep ($100)	110.00
Total expense per year	$400.00

This would give the owner a home that could be rented at $60 to $75 per month for only $33 rent.

Amortization.—Suppose it was desirable to pay off this $3000 mortgage with interest on the amortization plan, how much would have to be saved or allowed for this purpose each year?

By turning to the chapter on Institutions for Savings and Investment (p. 337) will be found a table showing what amount would have to be allowed annually for $1000 at 5½ per cent. if payable in twenty annual installments.

This table shows that yearly payments of $83.68 would have to be allowed for each thousand dollars, or three times that amount for $3000, which would be $251.04 per year for nineteen years and $83.62 for the twentieth year for each thousand dollars, or $250.86 for the $3000 on the twentieth year. The total paid in in the twenty years would be three times $1673.54, which would be $5020.62. The difference between this amount and the principa of $3000 shows that $2020.62 would be paid for interest.

If, however, interest is paid annually at 5½ per cent. it would

mount to $165 per year and for twenty years would be $3300, or 1279.38 more than under the amortization plan.

If the debt is to be extinguished in ten years, of course the nnual payments would be just twice the amount mentioned.

Taking Stock.—Mention elsewhere has been made of the neces- y of taking stock several times a year of the family wardrobe. a larger sense, there should be an annual stock taking of the ancial condition including the needs of the family. This may be vided into a record of present and prospective needs and a record one's possessions at the end of the year.

Inventory of Real Estate and Personal Property.—There uld be an annual or more frequent inspection of the house and emises, taking note of present and prospective repairs that may necessary; one should at the same time make an inventory of all rsonal property worth listing, as referred to in another chapter. al estate should also be listed, together with money on hand in the bank, investments, and money due the family, so that one ay know the first of the year the approximate wealth of the family. omparisons should be made with the situation in other years.

The foregoing are general suggestions, but they may be worked ut to suit the needs of each individual family.

Credit in Household Finance

There is nothing that a business man prizes so highly as credit. There is nothing that many a wage-earner and many a housewife fights so shy of " as credit.

A man in business does not hesitate to *use* his credit to the mit, if it is necessary, but he is very careful not to *abuse* it. He uards his credit as he does his reputation. If it is necessary to orrow money he does not shrink from doing so, and it is not con- dered any reflection upon his ability, or of his standing as an dividual, or as an officer of a company. The householder, how- er, is often very much alarmed at the bare thought of a mortgage on the homestead, or a note at the bank, or perhaps at monthly lls from tradesmen. The idea often seems to be that cash must paid for every individual article as purchased. Some openly ast that " we pay cash for everything." One may pay cash for ny years and yet establish no credit, even with the firms that e been the constant recipient of one's cash. One of the dis- antages of this system is illustrated by the following true story:

For a number of years, a young man with a wife and two children, had enjoyed a responsible position with a very fair salary. The coming of the children brought added expenses, and with the rise in the price of commodities that took place about this time, he soon found that he could not save as much as formerly. He was one of those who pride themselves upon the fact that they "always pay cash" and that he "owed no man a penny."

Suddenly the most unexpected series of misfortunes befell the family. Their resources were swept away, long continued sickness and death compelled them to fall back upon their little capital which soon dwindled. To meet new demands, meant the sacrifice of this life-long principle of "paying cash." It meant that a balance in household accounts would have to await the coming of several pay-days. Going to the tradesmen with whom he had dealt for a number of years, men who had received his hard earned cash regularly from day to day, he explained the circumstances and asked for sixty or ninety days' time on his household bills.

One consulted with another. Here was a young man who had always paid cash they argued, and now, after running up a bill with them for the first time, he was asking for a sixty or ninety day extension of the account. "He must be gambling or speculating" they feared, and with some such idea in their minds, they refused the credit he had asked for, suggesting that he might go to the local bank and borrow the necessary money.

In the years that he had lived in this community, he never had thought of the bank as an institution in any way related to himself. It was therefore with considerable timidity that he approached one of the bankers and asked for a loan of a hundred dollars.

"I—I would like to—to borrow a—a hundred dollars," he said.

"May I ask your name, sir?" kindly inquired the cashier.

"And you mean to say you have lived here seven years?" continued the cashier. "Strange I have never met you. Do business with one of the other banks?" he asked.

"No," was all the prospective borrower could reply.

"If you will have some responsible party, say one of the merchants with whom you do business, endorse your note, we will be glad to accommodate you," said the cashier, as he turned to give his attention to more pressing affairs.

And now for the first time in his life, the young man began to see the value of credit. What mattered it that for seven years he had never failed to pay cash for all of his purchases? Cash was gone and the only thing that could save him was "credit," something he did not possess. To his dismay he realized that there was not one business man to whom he could go to ask this favor.

Fortunately, the temporary relief came from an unexpected source, but he had learned his lesson. In the course of time he paid his debts and once more had a couple of hundred dollars in the savings bank; but now he transferred that amount from the savings to the checking department of the bank. Going to the cashier who had refused to loan him the hundred dollars, he again introduced himself, and said that he would like to open a small checking account.

Opening up the checking account by depositing his two hundred dollars he now made it a rule to deposit the full amount of his salary check to his credit in this bank, paying all his bills by check.

He picked out a new set of tradesmen, and informed them that he was a department manager in Smith & Smith's, the big steel people; that he would like to open an account and that he paid his bills by check betwee

e first and tenth of each month. "You may refer to the First National ank of this city, if you wish any references," he said.

Not one of these tradesmen refused his account. Having opened these ccounts, he went to the department stores in the city and repeated his xperiment, giving the various suburban merchants as additional references. o difficulty was experienced in securing a monthly credit with each one of hese big stores to the extent of a couple of hundred dollars.

In the course of a few months, what with his savings and his regular eposits, his daily balance easily averaged four or five hundred dollars for he month. He also made it a point, never to enter the bank without atracting the attention of the cashier. He endeavored to make the acuaintance of the assistant cashier and the various tellers, so that they all new him by name.

"Yes, that's one of Smith & Smith's rising young managers," he one day eard the paying teller say to the assistant cashier. "It is as good as a aise in salary," he thought as he left the bank. In the meantime, the fficers of the bank had noticed his checks coming in day after day, and ometimes a deposit by mail. He was now a regular customer of the bank nd as such, he reasoned he was entitled to a little credit, so going to the ashier who once had turned him down, he asked to borrow two hundred ollars, for sixty days. The request was granted at once, and the proceeds of he loan were deposited to his credit.

Six weeks of the two months had passed, when the young man again appeared before the cashier, but this time to pay the note before it was due. In the course of time, the experiment was repeated, and it was not long after that his credit was good for a thousand dollars, and without security or endorsement. For this splendid credit he merely paid a few dollars for interest. The stores that had refused him credit now clamored for his trade, but he had no need for them.

The Household Credit System.—As previously stated, this is a true story, and it should be taken to heart by every young man and by every head of a household whether husband or wife. The most valuable financial aid anyone can secure in starting out in life, is not money, but *credit!*

Every young couple should establish at once such credit with the local banks and tradesmen, and if a family has been going along on the cash basis and patting themselves on the back for it, let them at once "right-about face" before the storm comes, and seek shelter under the protecting wings of "Credit." A bank account, however small, should be started at once. Husband and wife should both make themselves known at the bank, and they should be seen going in and out from time to time. Their checks and deposits, although small, will not escape the observation of the banker, and should the question of a loan come up, they will not be strangers to the banker. Monthly charge accounts should be opened with local tradesmen and also with the big stores in the near-by city. *All such bills should be paid by check, usually the first of each*

month, and not with cash, daily, weekly or at any other ti
Occasionally weekly settlements may be made to advantage v
grocers or markets.

Disadvantages of the Cash with Purchase Plan.—Aside f
the lesson taught by the foregoing story, paying cash has m
disadvantages.

Loss.—Pocket-books are lost or stolen by sneak thieves. Se
hiding places seldom escape the scrutiny of the experienced burg
Mistakes are easily made in making change. It is very eas
drop money when extracting it from a pocket-book. Loss is by
means a small consideration in the question of keeping mone
the house or about the person.

Accounting.—If one wishes to keep a record of expendit
and to account for money received and disbursed, it is rathe
annoying and a difficult thing to account for every day's purch
and balance a cash account. The time and energy taken for
purposes is often more valuable than a missing balance of a do

Keeping Change on Hand.—It is difficult always to have s
cient small change to meet the requirements of pedlers and
emergencies in which bills are not easily converted into change

Paying Cash Does Not Always Make One Thrifty.—It is o
claimed that one will not buy so much if one has to pay cash fo
This is a wrong principle to start with. If the article is neede
should be purchased regardless of how it is paid for, with cas
by check. If it is not needed, one should have sufficient stren
of character to resist its purchase. On the other hand, if it
temptation that should be resisted, it will be easier to resist
check must be signed and filled out in order to pay for it.
haps, by the time the check is ready, resistance to temptation
been fortified and the battle won.

The woman who can be trusted with cash certainly shoul
trusted with credit. If she will abuse one she will abuse the ot

Advantages of the Credit System.—Charge accounts do a
with the necessity of keeping cash on hand, or of always tryin
keep sufficient small coins with which to make change. They
plify household accounting and bookkeeping. They offer no op
tunity for loss. A receipted bill proves payment.

It is human nature to pay greater attention to those enjo
more than the usual amount of this world's goods, and the po
sion of a charge account to many clerks is an evidence of the

status of the customer. Absurd as such things really are, they cannot be gainsaid. Charge account customers do receive more attention from tradesmen and their employees, and from the help in large department stores, than customers who pay cash. In the larger stores, clerks have no way of knowing whether the charge customer represents a million dollars or thirty dollars a week. The only safe way to prevent a chance of offending the millionaire customer is to show the same degree of courtesy to all charge customers, it being assumed that few well-to-do customers pay cash. In the smaller stores it is often assumed that the cash customers cannot secure credit and therefore their means are limited. In other words, they must be living a hand-to-mouth existence.

It has been said that with a charge account more will be purchased than if cash is paid. This is untenable. At first, there may be a slight tendency in this direction, but as one becomes accustomed to the charge method a successful effort will be made to keep the charge bills for the current month within a certain figure. The tendency to overpurchase on a charge account is more evident with groceries than with other items of household expense. This point has already been touched upon, but it is again emphasized because experience is all that will teach some people. The advantages in favor of this system are so evident that no one who has tried both systems would think of going back to the old "cash with order" plan.

Department Store Credit.—Department store credit is of course the same kind of credit afforded by any charge account, but there are many advantages offered by the big store that cannot be secured from the small merchants. With the butcher, the baker and the grocer, only certain kinds of merchandise are sold, but the customer of the large department store has for his or her selection a choice of the world's markets. Such charge accounts offer the advantage of having all purchases, representing perhaps a dozen different lines, listed on one bill at the end of the month. Instead of a dozen bills from a dozen tradesmen, these purchases are listed on one bill. Instead of a dozen checks with which to pay a dozen bills, one check and one operation settles the account.

Department store bills are supposed to be paid the first of each month, or not later than the 10th of the month. Some stores allow fifteen days after the first of the month before payment is insisted upon. Of course, if one wishes to keep his credit good, such

bills will be paid before the expiration of the last day allowed, but in an emergency these days of grace may be used. In this way such an account gives a family from forty to forty-five days credit. As an illustration, goods purchased the first of October will be billed November 1st, while the limit fixed for the payment of the bill is usually ten days later, or November 10th, and in some cases fifteen days later.

Many stores advertise that if Christmas purchases are made before a certain date in December, say the fifteenth, that all such purchases will be charged on the January bill, thus giving February 1st as the date for presentation of the bill, with an additional ten days for payment.

Of course there are many who belittle such courtesies, but on the other hand, a credit of thirty to forty days has been a god-send to many a family in an emergency.

Charge accounts of this nature make it possible, under certain circumstances, to secure articles of clothing needed immediately, whereas if cash had to be paid, it might not be forthcoming until the following month. It makes possible the purchase of true bargains—articles sold at less than their real value to the purchaser. There are few families, no matter how unlimited their wealth, that are not at some time hampered for ready cash. Especially is this true of the low-salaried man and wage-earner, or the man of small means whose capital is tied up in business, or in some investment such as the purchase of a home. Sickness and death, and other unforeseen emergencies, often bring about temporary embarrassments and credit of this nature is not to be despised.

Abuse of Credit.—"There is nothing so timid as credit" is a well-known statement. There is nothing so easily abused as credit, and there is little of a financial nature so valuable as credit. For these reasons, one should prize it and cherish it, and avoid every appearance of abusing it. Bills should be paid promptly, and the extra time given by merchants for the payment of bills should not be used unless absolutely necessary. The suggestions regarding the full use of credit are all legitimate, but they are not made for the purpose of urging anyone to use their credit to the limit, but merely to point out the extent to which credit of this nature may be available in an emergency. The record of one's check stub should be kept accurately, and the greatest care should be taken

not to overdraw one's account or even draw one's balance down to too small a reserve.

Another phase of the subject of credit that needs to be considered is that of the relation of credit to the retailer and distributer.

Retailer's Credit.—It is a well-known fact that many jobbers and wholesalers allow their retail dealers a discount of 2 per cent. from the amount due if their accounts are paid upon the receipt of bills, or within a reasonable time thereafter, generally specified on the bill by the jobber or wholesaler. This practice is known among retailers as "discounting" their bills. "Cash" payment has come to mean ten or thirty days after the date of a bill by many firms; that is various lines of industry adopt a standard rule permitting a certain credit. In the grocery trade, thirty days is usually allowed the retailer, and if his bill is paid within or before that period, and the individual firm allows a cash discount at all, the dealer is permitted to deduct that percentage from the face of his bill. Other businesses allow sixty to ninety days' credit, before a bill needs to be paid.

This practice might seem a reasonable argument as to why the retailer should allow his customer a limited credit of thirty days in which to pay his bills.

Retail Customer Should Be Allowed a Discount for "Cash."—On the other hand, if the wholesaler is willing to allow the dealer a discount for cash, why should not the dealer allow the retail customer a similar discount for cash payments? There seems no good reason why the cash customer should not be allowed such a discount. In discussing this subject, many have advised a ten per cent. discount for the cash retail customer; but when retailers are allowed smaller discounts than this from the wholesalers, it is not fair to ask the retailer to grant his customer a greater discount for cash, than he can secure from the wholesaler.

Trade discounts for cash vary from 1 per cent. to 5 per cent. and probably the average would be about 2 per cent.

Some One Must Pay for Credit.—The public should not lose sight of the fact that credit must be paid for by some one. Credit extended to customers often means that the dealer must borrow money with which to carry on his business, and borrowed money must be paid for in the form of interest which is a charge on the business. The only way this charge can be recovered is by adding

it to the selling price, so that after all, it is the consumer that indirectly pays for the extension of credit. Unless the store gives a discount for cash every purchaser helps to pay this extra price. This subject is touched upon in the chapter pertaining to the rising cost of living.

Borrowing Money of the Bank.—In case of emergencies, a family may be hampered for cash with which to pay current bills. To allow bills from tradesmen to remain unpaid beyond regular limits of credit is poor policy, as it destroys the credit of the family and adds to the financial burden of the dealers. They must carry such accounts, and if many customers resorted to delayed payments, the dealer in turn finds difficulties in meeting his own obligations. He may be compelled to borrow money from the bank and pay interest upon the loan in order to protect his credit with the wholesalers.

In such a predicament the head of the family should arrange a loan with the local bank for enough money to tide the family over the emergency. If any one is to pay interest in such a case, it should be the debtor represented by the family and not the creditor represented by the dealer.

Banks make reasonable loans for periods of thirty, sixty and ninety days, and usually charge six per cent. interest for the accommodation. The amount of the interest for the period of the loan is deducted from the principal, and the balance called the proceeds is credited to the account of the borrower or paid in cash as desired. For instance, a loan of $150 for ninety days at 6 per cent. would yield the borrower $147.75, the interest $2.25 having been deducted from the face of the note.

The date a note is due is called the date of *maturity*. Most states allow what is known as "days of grace," generally consisting of three days after the date of maturity, in which a customer has an opportunity of paying the obligation due, before further action may be taken by the creditor. If a note falls due May 15th, the debtor has until May 18th before legal action can be taken to collect the note.

If a note falls due on a Sunday or a holiday, its date of maturity would be the next business day. If Saturday was a holiday and note was due on that day, the borrower would have until Monday to pay the note.

BUYING ON THE INSTALMENT PLAN

redit" and "instalments" to many people mean the same but they are not synonymous. Credit is based upon some- we already have, such as real or personal property; cash on or in the bank; character and a reputation for honesty and tness, and earning ability. Instalments to a certain extent *ortgages on the future;* as a rule, they are based upon pros- e earning capacity, and if that is their only security, the risk ertain, as sickness, death, accident and idleness may in a day away such protection.

ere has been much prejudice against this method of buying, has been blamed for the improvidence of many, but odium not be attached to the system which belongs to the abuse of tem. There are impecunious people who likewise abuse their and who would run through every dollar that might be left There is a feeling that buying that for which one is not able ready cash is an evidence of shiftlessness and a confession of means. This sentiment, owing somewhat to the improved ls of handling instalment accounts, is gradually wearing

advantages of Instalments.—What are some of the objec- o the instalment system?

e instalment method of buying began with the purchase of ire and household fittings. In the aggregate, the cost of a new home amounts to a considerable sum, however simple the home; hence the inability of everyone to pay cash, not mited the number who could afford to set up housekeeping. o limited sales and consequently the dealer's output, which se to the instalment system.

rons of the better class houses, naturally did not feel it such hip to meet the expense involved in the purchase of house- uipment, and so it fell to the cheaper class of dealers who to those of limited means to inaugurate this system.

ing advantage of the public's necessities, the allurement of ying and easy payments enabled them to palm off inferior pon unsuspecting purchasers. Not only were the articles inferior in material and construction, but the prices asked much and in many cases more than those asked by reputable for a better line of goods. For these reasons the system soon o disrepute, and to such an extent, that many firms of this

character openly advertised to deliver all goods in "plain and un marked wagons," so that the public who patronized them might b saved the humiliation of having neighbors see before their do an instalment company's wagon.

The disadvantages of this system do not rest alone upon fal pride. If buying on this plan means cheaply constructed and shod furniture; if it means higher prices than charged elsewhere f better merchandise; if it means the payment of high rates of inter on the unpaid bill, this form of buying should be avoided.

If instalment buying causes one to lose one's sense of perspecti resulting in the purchase of expensive phonographs, piano-playe automobiles and other things beyond one's economic standard, a beyond one's ability to pay without the sacrifice of real necessiti then *instalment buying is all wrong*. Many a small house that rep sents a value of only two or three thousand dollars boasts o garage on the rear of the lot. These things mean deferred or ins ment payments. They mean that money is being spent for luxu that under such conditions could only be obtained through s methods of payment. They mean that suitable living conditi environment, food, clothing and education must be slighted, if neglected, in order to pay for the possession of the piano-pl or the automobile. These are the principal disadvantages instalments.

Advantages of Instalments.—Buying on the instalment pla open to the same objections and the same advantages as "cred Both may be abused. Purchasing on the instalment plan, in a v is but an extension of the credit system, although not based u the same principle. Although of a similar nature, the object are more serious and the advantages not so valuable as that wh obtains under the credit system.

The business done by the early instalment houses becam great that reliable firms, especially those handling merchandise r ning into large sums of money, felt it necessary to resort to part-payment plan in order to compete and to dispose of their w In the adoption of the instalment system, however, the better ho perfected the plan and did away with many of its abuses, forcing the cheaper concerns to discard their old methods. To the instalment system is an established and an economic facto the business world.

That this system contributes to extravagance is true onl

that class of people who under any circumstances would be extravagant, but they are of the type of people, who having only ten dollars in the house would spend the greater part of it for table luxuries. To the provident, the careful and the ambitious, the instalment system holds out no dangers. It simply extends their credit and gives an opportunity of possessing at once necessities that otherwise they could not enjoy for months or years to come.

In these days of economic pressure it is a difficult matter for young people just starting out in life to find the means with which to equip a home and at the same time maintain that home. Three hundred dollars would be a modest sum under any circumstances with which to furnish a most unpretentious home. Of course, all young people in starting should have some money ahead, and the use of the instalment method of buying should come in only as a supplement to savings on hand. It is a mistake for young people just starting out to purchase special suites of furniture, or even perhaps to attempt to furnish a house throughout on the instalment plan. It is better to buy the minimum requisites first, such as are most necessary, and then from time to time select additional articles as means permit. To such, this plan if not abused, is a legitimate method in family finance, and the right people need have no fear that it will lead them into extravagance.

Instalments Another Method of Saving.—Of course, in the consideration of any phase of human activity, it is presupposed that common sense and fair judgment exist. The lack of judgment would rob many a legitimate undertaking, and many a business principle, of its worth and value.

There are cases where the instalment plan can be made the basis of economy and saving, in place of its being the cause of extravagance. A suitably equipped home is necessary to permanent happiness and well-being. To deny oneself of life's necessities, or even of some of its so-called luxuries, year after year, because of inability to accumulate in one sum several hundred dollars, is a grievous mistake.

Such forced economy, if practiced for several years, will determine the groove in which will run the family wheels for a long period of time, if not for life. The final development of a home is the result of a process that extends over years. There are many who can look back after ten, twenty and even forty years and honestly say, that at no one time have they ever accumulated sufficient money

with which to purchase a piano or to properly equip a home. One's laudable ambitions should be gratified. If not abused, the instalment plan makes this possible, permitting of the decent furnishing of a house, long before it otherwise might be possible.

In another way it is constantly adding to one's possessions. There are thousands of wage-earners and men of salary who never have acquired the habit or ability to save. To such, the instalment plan has been a salvation, because it made possible not only the necessities but some of the justifiable luxuries of life, and at the same time it added to their material possessions in a tangible manner. Another important argument in favor of instalments is the fact that the necessity of making regular and systematic payments, at definite intervals, over a long period of time, has fixed the habit of saving for many who never before had been able to lay aside one dollar. They have found that they can lay aside a certain sum for a definite purpose each week or month, and when that obligation has been cancelled, they realize that if they can do it for one purpose they can do it for another, which eventually means a savings account at the bank.

The purchase of a house, its proper equipment, and even its adornment, with those things that contribute to the real culture of its inmates, these are all laudable ambitions, and if they cannot be gratified because of the lack of ready funds, there should be no hesitation or feeling of false pride to deter one from taking advantage of the instalment plan.

Especially is this true in relation to the purchase of a house. A few hundred dollars cash, and the monthly payment of a certain sum, means the possession of a house and a home that might never be acquired, if one waited for the accumulation of sufficient funds with which to purchase it outright.

Luxuries on the Instalment Plan.—The abuse of the instalment system has already been mentioned. The term luxury has become somewhat of a misnomer. Some things that once were considered luxuries are now looked upon as necessities. A mere existence is no longer sufficient for the average American family. One has a right to expect and ask for more than a mere existence.

The feeding of the body, the clothing and housing of the same, are not all that is necessary. One's higher nature should be cherished and developed and that which rightfully contributes to real culture and true spiritual development may be considered a necessity.

A natural love for music, for instance, should be gratified if possible, and if the material necessities are being met by the family income without sacrifice, one need not hesitate to resort to the instalment system in order to secure a piano or any other musical instrument. There is, of course, a limit to this argument, but that limit is bounded only by common sense. It would be wrong for one whose life is a struggle for existence; whose home is mortgaged and whose family may be in need of food or clothing or the material necessities of life—it would be absurd to suggest that such a person invest in an automobile, a piano or a phonograph, simply because these things may be secured on the instalment plan.

Wisely used, however, the instalment plan presents opportunities that should neither be discounted nor disregarded.

QUESTIONS

1. In what way should the family be a co-operative institution?
2. Should self-supporting children living at home pay parents board? If so, on what basis should such payments be figured?
3. How much does it cost in your community for a self-supporting young woman to live comfortably? How much of this amount represents room rent? board? laundry? clothing?
4. What is meant by "Credit"?
5. What are the advantages of credit, of instalment buying, of a charge account? What are their disadvantages?
6. Make a budget for a young woman supporting herself and not living at home, supposing that the weekly salary is twelve dollars?
7. In case of emergency, should a family that has dealt with tradesmen for a number of years, ask for an extension of credit? If not, in what way should they endeavor to tide themselves over the emergency?
8. How may "credit" be abused?
9. Should interest be paid on instalment accounts?
10. When, and for what, is the "instalment plan" warranted?
11. In what way may instalment buying contribute to extravagance; form a basis for savings?

PROBLEMS AND DEMONSTRATIONS

1. Ascertain from one or more reputable dealers on what terms furniture may be purchased. If possible, secure a blank contract used by merchants in selling goods on the instalment plan, and explain its principal features.
2. A family purchased a piano on the instalment plan, paying $60.00 cash, and $15.00 a month until the balance due was paid. It took three years to pay for the piano. What was the price of the instrument?
3. At the end of the first month, 7 cents interest was charged; the second month 14 cents, the third month 21 cents, and the same way 7 cents was added to each additional monthly instalment. How much interest was paid in all?

4. What was the total cost of the piano, including interest?
5. Make a list of the necessities required in fitting up a n assume an amount available in cash and the balance t by instalment credit; how large a monthly repayment c account will be required?
6. Procure a "cash slip" if possible showing a purchase of meat from a local store; a slip from a department store purchase of any goods; a monthly bill from a local st department store.
7. If goods have been returned on any of these bills, show credit has been given for the same.
8. Explain the method of returning goods for which cash h to a department store; explain the same transaction i been bought on credit.

THEMES FOR DEBATE

Resolved:

1. That Paying Cash is a more economical thing to do than of the Charge System.
2. That buying on the Instalment Plan is inimical to the v average home.
3. That it is as necessary for the Family to establish credi the Business Man.

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CHAPTER IX

HIGH PRICES AND MODERN PROBLEMS OF LIVING

"High-Living."—"The cost of high-living" is a phrase recently invented in the discussion of the causes that have contributed to the "high cost of living."

It is true that there are many things which we consider necessities which our parents looked upon as luxuries. We have a right to consider some of them as necessities; but others are unjustifiable expenditures. Many a girl and woman is to-day wearing shoes that cost ten to twenty dollars a pair. Automobiles and thousand-dollar piano-players and expensive talking-machines are common to many a home being supported upon a small salary. Social customs are indulged in that should only belong to the wealthy.

Suppose the average family should name over the things they have and enjoy which could be dispensed with without real hardship or inconvenience, and without lowering one's standard of living! If we must live in the exclusive neighborhood affected by the rich, that is, ape others; if we must on a two or a three-thousand-dollar-a-year income try to live on the same scale as the family having an income of five or ten thousand, then our standards are false. We are contributing directly to the high cost of living because we are indulging in "high-living."

The High Cost of Living.—Although the economist talks about the cost of "high-living," the present high cost of *decent* living is positively alarming. Never in the history of the world has the price of necessities been so high, and year by year they continue to advance. In the fifteen years before the war, the retail prices of common foods increased two-thirds over prices prevailing from 1890 to 1900, and the war conditions sent them much higher. Economists tell us that perhaps never again will low prices for commodities prevail. Whether this is true or not, some solution for the present problem must be found, and one of the solutions is the training of those who expend the family income in the selection and purchase of food and other materials for the home; and how to proportion the available fund among all the expenditures that modern life requires.

Wages and Salaries.—It has only been in specialized, or limited fields of endeavor that wages and salaries have greatly advanced, except under abnormal conditions. It is true that Unionism has secured better standards of living for the unionized workman, but in so doing, in some instances, it has made awards to certain classes of labor that are perhaps unfair, and this burden is in part thrown upon the shoulders of the non-unionized wage-earner, as represented by the clerk, the professional man, and that undefined mass known as the "middle classes."

The "Middle Class" the Real Burden Bearers.—If capital demands more return upon investment in the form of dividends, or if unionized labor demands better wages from capital, this unprotected "middle class" must bear its share of the increase, without a corresponding rise in wages, and so between the two, the average citizen who neither can be a capitalist nor a Union man, is constantly being ground to the point of desperation.

Capital is necessary with which to maintain our industries and Unionism is perhaps as necessary to protect labor against the unjust demands of capital, so that it is not the well-to-do, or the unionized tradesman, that demands the attention of the economist so much as this mythical and yet very real middle-class. During the past twenty years the earning capacity of *unorganized* labor has advanced but little, except as influenced by abnormal or local conditions, but the purchasing value of the dollar has greatly decreased. Under such conditions most people must either sacrifice their standards of living or forfeit the accumulation of money through saving.

Abnormal Conditions Affect Prices and Wages.—Abnormal conditions may affect wages as well as prices. For instance, during the war the demand for munitions and war supplies of various kinds brought about an abnormal demand which increased wages in such plants and increased wages drew laborers from many other activities. In these, in turn, higher wages had to be paid to hold the labor force, so that to a certain extent the shortage of labor in many fields helped to raise the temporary wage of even the common street laborer, but the general wage increase has not been equal to the increase in prices.

The following statistics of the Federal Bureau of Labor show the increase in the retail price of foods, based on the market of forty industrial American cities from 1890 to 1913, or just before the influence of the war manifested itself as a factor in raising prices.

These prices are based upon "an *index figure*"; that is, the prices of an article for the years 1890 to 1899 inclusive are averaged and the average in each instance is taken as a basis of comparison, which is given the value 100 as "index figure."

The figures for the subsequent years are compared with this standard or average, showing either increases or decreases in price above or below the index 100. The table is given below and is to be read as follows: if the average price of sirloin steak during the years 1890-99 be represented by 100 units, then the price in 1896 would be stated as 98.8 units; in 1900, as 107.1; in 1907, as 116.7; in 1910, as 134; and in 1913 as 171.3 units.

RETAIL PRICES OF FOOD ARTICLES IN THE UNITED STATES.
AVERAGE PRICES FOR

Commodity.	1890-99	1896	1900	1907	1910	1913
Sirloin Steak	100	98.8	107.1	116.7	134.0	171.3
Round Steak	100	100.5	109.8	128.4	149.9	199.5
Rib Roast	100	99.4	109.3	123.0	137.7	172.0
Fork Chops	100	97.8	108.9	140.9	178.3	213.8
Bacon, smoked	100	96.3	110.3	157.7	204.4	225.9
Ham, smoked	100	96.5	106.9	131.0	159.4	181.2
Lard, pure	100	92.1	104.9	133.5	172.9	166.6
Hens	100	96.1	99.6	131.3	155.0	171.8
Wheat flour	100	94.2	94.6	118.2	135.9	127.4
Corn Meal	100	92.8	95.6	133.5	147.9	160.4
Eggs—strictly fresh	100	90.3	99.1	138.2	158.2	174.8
Butter—creamery	100	93.1	101.2	127.3	139.9	153.2
Potatoes—Irish	100	78.8	92.8	122.2	119.5	151.2
Sugar—granulated	100	96.2	103.9	98.7	102.5	95.3
Milk	100	100.1	100.0	118.9	131.6	140.2
Average for the fifteen articles	100	94.9	102.9	128.0	148.5	167.0

The U. S. Department of Labor issued in March, 1917, a review of food prices which shows that the annual food bill of the average family has grown from $339.30 in 1913 to $425.54 in 1917.

In ten years, the department's experts estimate, the advance in the cost of food has so far outstripped wage increases that the workman who drew $3 a day in 1907, although in 1917 he received on an average of $3.48, really found himself in that year, because of higher prices, just 69 cents a day worse off than in 1907. It is estimated that if a dollar's worth of food bought in 1907 weighed ten pounds it would weigh to-day a trifle more than seven pounds.

"Despite the average increase of 19 per cent. in wages an hour in the last ten years," the department's statement says, "and despite

a cut in hours worked of 4 per cent., the rising cost of foods has operated to reduce the pay of the American workingman about 16 per cent., expressed in terms of food his dollar will buy.

"A workingman who made $3 a day in 1907, working ten hours a day, in 1916 worked nine hours and thirty-six minutes a day and drew $3.48 for it, but it cost him $4.17 to buy the same quantity of food his $3 would cover in 1907.

"Cold storage, rebilling, reshipping, and withholding of commodities from market are suspected as contributing to the present abnormal rise in the prices. Whether some persons have conspired to engross the markets the department of labor cannot state. But the reports of the bureau of labor statistics seem to lend some color to such an opinion."

Causes of Rising Cost.—Why do the prices of necessities continue to rise? This is a question that has confronted nearly every wage-earner during the past few years. The causes that have led to the seemingly exorbitant high prices that obtain at present, have baffled even those who have made a careful study of the subject. A few of the factors that help to establish prices may be mentioned in a general way.

Walter E. Clark in his book "The Cost of Living" divides the causes for high prices into "Supply Causes" and "Demand Causes," according to the familiar fact that "Supply and Demand determine prices," and he classifies these causes as follows:

I. "Supply Causes."—Those restricting the supply of things for sale in markets. (*a*) Exhausting natural resources. (*b*) Retailers' undue profits and short weights. (*c*) Adulterated goods. (*d*) Cold Storage. (*e*) Labor Unions. (*f*) Excessive transportation rates. (*g*) Tariffs. (*h*) Trusts.

II. "Demand Causes."—Those increasing the purchase of goods in markets. (*i*) Increasing population and immigration. (*j*) Speculation. (*k*) Extravagance and waste. (*l*) Rising standard of living. (*m*) Increasing gold supply.

To the Supply Causes might be added "Scarcity of Labor" and to the Demand Causes, "Increasing Exports." The war is effective to increase prices both by restricting supply, and by stimulating demand.

Supply and Demand.—This is the basic law upon which is determined the price of all commodities. If any supply is not equal to the demand, there is less than is needed and this very fact increases

the demand, so that prices advance in response to the highest bidders in the open market.

This country needs a stated amount of wheat annually with which to feed its population; if the wheat crop for the year is a total or partial failure, since more want wheat than can be supplied, some are willing to pay higher prices in order to get it and wheat prices go up because the supply is limited. If the crop is normal and the population has increased, or the normal population suddenly finds new uses for wheat products, the consumption is increased, relatively more is demanded than can be supplied, and again prices go up. If we export more wheat than we should, the available supply is decreased and again prices rise. There are many factors that control both the supply of, as well as the demand for, products; but unless supply keeps pace with normal demands, the result must be increased prices.

Labor a Factor in Determining Prices.—Scarcity of farm labor means inability to harvest the crops properly. The farmer loses his crops or he must pay more than ordinary wages to secure help, and this increased cost must somehow be met. Even though the farmer may not be able to extract it immediately from the consumer in the form of a directly increased price, his loss reacts upon farm conditions, discouraging farmers from increasing production, and with a smaller supply prices go up. The burden finally falls upon the consumer.

In many lines of industry labor has organized and through concerted action has forced higher wages from employers. The increased wage must be met, so it is passed on in the form of prices by manufacturer, wholesaler, jobber and retailer, and the ultimate consumer again pays the bill.

A scarcity of labor in any branch of industry results in conditions similar to those experienced by the farmer under like conditions. Unusual demands for labor in one industry mean higher wages in that industry and thus labor is attracted to the industry bidding through the highest wage. The higher wage means a direct increase in the price of the commodity manufactured, while the other industry stripped of its man-power suffers from low production, which means a restriction of supply and higher prices. Abnormal conditions, such as war, whether within the country or in some other country, which increase demand in relation to supply, whether of commodities or of labor; as well as the added demand

for capital in war industries which deflects capital from its normal channels of investment, all create higher prices.

The average citizen feeling the pinch of economy necessary to meet rising costs, gives little concern to the fundamental economic conditions that control prices, feeling himself far removed from them, or perhaps helplessly impotent to change them. There might, however, be some very direct influences brought to bear upon prices if an intelligent study and effort were made by consumers generally.

Study of Social Conditions Necessary.—It should not be sufficient to study the economies of the home only. There are many causes for high prices operating in the outside community and nation, and every man and woman owes it to society to study the economic conditions of the country at large. Is it the natural law of supply and demand alone that is inflating prices or are there abuses in our system of distribution?

If there are abuses in the handling of food products they should be done away with, but before we can give to the community intelligent help, we must first study the causes of existing conditions.

Unjust Weights and Food Adulterations.—How much is lost to the buying public through unjust weights is not known, but it must be considerable. In some communities there are regulations and laws governing the weight of a standard loaf of bread. The Massachusetts Commission on the Cost of Living quotes Bulletin No. 9, published by the Department of Weights and Measures for that state, as follows:

"Of 4983 10-cent loaves reweighed, 29.2 per cent. were deficient in weight, the average deficiency being 1.226 ounces. The loaves in question all bore a statement of weight on the wrappers. There appears to be no doubt that the scaling down of the weight was deliberate and intentional in most instances."

Deficient weight is not confined to bread but may be found in other articles of food. We have the dishonest scale and the dishonest dealer, as well as the dishonest measure. Much might be accomplished by vigilance in enforcing the laws pertaining to legal weights and measures, resulting in a decided saving for the average purchaser.

The loss from adulterants might be considered as affecting a just measure or weight. It is claimed that this loss amounts to a hundred million dollars a year to the American consumer. The Pure Food laws have done considerable to reduce this loss by food adulteration

and consumers should read the labels on every food container to see if it bears the "pure food" and net-weight labels required in Interstate Commerce, and others required locally by many states.

The section on Weights and Measures should be studied carefully in connection with this subject. (See p. 220.)

Cold Storage.—To what extent Cold Storage plays a part in making high prices is not known. It does make possible cheaper butter, eggs and other products in seasons of the year when they are scarce, but in times of surplus it also provides the opportunity of hoarding vast accumulations of supplies in attempts to corner the market, and this raises prices.

Cold Storage houses should be subject to the investigation of the authorities at any time, and published statements should be given out as to the amount of food products in storage at stated intervals throughout the year. Certain products, perhaps, should be limited as to the time that they may be kept in storage, and perhaps it should be possible to stamp food containers with such information.

Transportation.—That our distributing system is far from perfect was shown during the winter of 1916-17, when food-riots took place in some of the larger cities of this country, despite the fact that there seemed to be an ample supply of foodstuffs in the principal regions of production. This apparent shortage was due to the inability of the railroads to control the distribution of the country. The demand for war materials to be shipped abroad had grown so great, that traffic in the east was blocked by miles of unloaded freight cars, while the west seemed unable to secure cars in which to move its food products to the east. This, however, represented an abnormal condition.

The fuel famine in 1917-1918 was due largely to transportation difficulties.

Exhausting Natural Resources.—Failure of crops has been classified under this heading, although it specifically applies to the reduction of the arable acreage of the country, the devastation of natural forests through fire, the wastage of timber through extravagant methods of cutting, the exhaustion of the soil, and similar wastes.

Timber has been cut ruthlessly without much regard for regrowth; the mining of coal has been conducted extravagantly and oil fields have been exhausted as though there was an illimitable supply. For generations the farms of New England were worked

until the soil was almost exhausted before fertilizers were used reclaim it. All these are factors that add to high prices and ea one of these factors represents subjects worthy of investigation.

Tariff.—It has been assumed quite generally that a high p tective tariff means high prices, as such a tariff is supposed to p vent imports that have been manufactured or produced abroad much lower prices than they can be produced in this country, t giving the manufacturers or producers of the protected article seeming monopoly which might result in uncontrolled prices. protective tariff does not, however, necessarily mean higher re prices in general. That it does contribute to the price of cert articles is true, but it is a small factor in determining the cause the advancing prices during the past few years of the high pro tion period.

The Trusts.—The control of large industries, generally kno as Trusts has resulted in a high efficiency in the business under control of such organizations. Production has increased almost yond measure; the cost of production has been greatly reduced, a in many cases the methods of distribution have been perfected, that while in a few instances such monopolies may have been cause of high prices, the history of trust-controlled industries sh that they have resulted in a lowering instead of a raising of re prices as compared with those that obtained before the day of Trust.

That the Trust has resulted in abuses that need to be correc and that they may be inimical to public welfare, in curtailing opp tunity and creating unfair competition may not be open to argume but we are now only concerned with their relation to retail pri which seems to have been generally favorable to the consumer.

Increased Gold Supply.—This is one of the real causes high prices. Whenever the production of gold increases out of p portion to the growth of business, gold itself, like any commo produced in excess, becomes cheap, and thus money which is go value becomes "cheap"; we know money is cheap because prices q generally advance, although wages and salaries are more or stable. Never in the history of the world has there been so gre production of gold as in recent years. Abnormal war conditions l brought to this country an unusual proportion of foreign g Therefore the supply of money in this country suddenly became normally plentiful and cheap; and to meet the lowered valu money created by so great an influx of gold, prices advanced.

The world's gold production from 1860 to 1870 was $1,263,015,000; from 1890 to 1900, $2,101,240,900; and from 1900 to 1910, $3,780,364,500. The annual production has increased from $126,301,500 for the 1860-1870 decade to $460,892,733 during the three-year period from 1911-1914.

Aside from general supply and demand, this gold increase is one of the principal causes of high prices, but the serious part of it is the fact that high prices and cheap money do not necessarily or quickly bring about high wages and salaries, and so the nation is confronted with the serious situation of the non-unionized, non-capitalist classes being compelled to make a dollar go much further than under normal conditions.

The Fluctuating Dollar.—It is manifestly unfair to measure one's earning capacity by a dollar that is directly related to changing prices so that it will buy more or less at one time than another; a dollar that while stable in the number of grains of gold it contains, yet fluctuates in what it will buy with every change in prices.

As an illustration, the four-thousand-dollar-a-year man is really only earning three thousand dollars a year or less, measured by the purchasing value of his income when he first contracted to work for that salary fifteen years ago. The twenty-dollar-a-week clerk, ostensibly is earning twenty dollars, but when he comes to exchange it for life's necessities it is hardly worth fifteen dollars as a purchasing medium, because the price of that which he needs has advanced to that extent.

Paying Cash.—Some have urged that retail credit raises prices. If the retailers of a community agreed to allow their customers, say 5 per cent. discount for cash, one might have a valid argument against the credit system that prevails in the retail business, and the saving effected would prove a considerable factor in reducing prices for the average family. One may not like to discontinue the conveniences of the credit system if no compensation was made by the dealer for cash purchases. Organized effort along this line may pay in any community.

No retailer, however, would allow a 5 per cent. discount for cash—perhaps 1 per cent. would be possible. A recent movement in the grocery retail trade in many communities has resulted in prices being set on a cash basis and a charge of 1 per cent. added to the total bill of all charge customers for the cost of credit. If a monthly bill amounts to $40, 1 per cent., or forty cents, will be charged the

customer as the expense of putting the amount on the books. The principle is the same as the banker who charges a customer one dollar a month for carrying his account, if the average daily balance falls below $200, the idea being that such accounts are unprofitable. The grocer, however, merely charges what is thought to be the actual expense of bookkeeping based upon the dollar purchase. Such a distinction between cash and credit prices is fair, though it may not be much of a saving.

With many the advantage of the monthly charge system would seem worth more to them than the forty or fifty cents it might cost.

Retail Deliveries.—An effort is being made in some communities on the part of retailers to discontinue delivery of goods purchased. About 2½ per cent. is the estimated cost for deliveries in the retail grocery business, while department store deliveries run much higher, being 4 to 5 per cent. and in some cases as high as 8 per cent.

If the retail customer could save this expense to the store there is no reason why the customer should not be benefitted to that extent, but in order to effect such savings it would be necessary to establish a uniform practice. So long as a store must deliver to part of its customers the proportionate savings derived from the non-delivery customers is not sufficient to warrant the dealer in making much of a discount to those who are willing to carry home their purchases. If the actual cost of distribution was proportionately taxed to those demanding deliveries, the same as charge customers are taxed in certain places, it might serve to discourage the system; but unless all merchants in a community agree to such a plan, competition will forbid an individual merchant from adopting it for fear of losing trade. Practically, a delivery service must be continued; but just as practically all can help by using it only to the extent necessary.

Returned Goods.—This is an evil in the department store trade, and one that such stores are trying to eliminate. The desire to satisfy customers by allowing them to take home goods for examination and garments for trying on has been greatly abused. Dishonest customers have been known to order garments for the express purpose of wearing them for some special occasion, returning them perhaps the next day. Returned garments often get soiled and damaged, in most cases they are mussed, and usually need pressing after being returned, so that the expense of the "returned

goods" department in a large department store is very heavy. The added "call and return" of deliveries is another expenditure, and all these expenses must be added to the cost of doing business, which means increased prices to everybody.

Department stores figure that about 3 per cent of their total C. O. D. (cash on delivery) sales are returned to them; and of course many sales made regularly are returned. Such goods are resold, although a certain per cent. must be figured for depreciation. The actual cost of maintaining "returned goods" departments, with the depreciation resulting is not generally known, but it is estimated at about 1 per cent., so that the customer might be saved 1 per cent. if the practice was done away with.

Three Opportunities to Save.—The retail purchaser might effect a saving in each of the three items mentioned, providing uniformity of action could be effected by retail customers with the dealers of a community. The statistics show that saving to be as follows:

			Based on Monthly Expenditures of	Saving
Discount for Cash	1	per cent.	$50.00	$ .50
Cost of Delivery	2.5	per cent.	50.00	1.25
Cost of Returned Goods	1	per cent.	50.00	.50
Total Saving				$2.25

One may say that one seldom or never abuses the "returned goods" privilege, if indeed one avails oneself of it at all, but if the system prevails in a community the non-user pays his proportionate share of the cost of both those who use and those who abuse it.

The above figures show that if these three policies of offering credit, delivering of purchases and the return of purchases were done away with, or reduced, the customer would effect a saving of $2.25, or some part thereof, per month on purchases amounting to $50.

If the "return privilege" does not exist in a community, then the saving made possible by the elimination of the other two policies would be $1.75 on the same basis of expenditures.

There probably will always be those who are willing to pay for these privileges, but if they are necessary economic factors in our social life, then those who use them should bear the full burden of their upkeep, while those who wish to dispense with them should be allowed a credit or discount equal to the charge made for such services.

The *System Magazine* (April, 1917) quotes a retail grocer who has adopted the following plan:

"When we charge an order we add 1 per cent. to cover bookkeeping cost; and we charge five cents for each delivery, regardless of size. The opportunity is therefore given to the customer to save the expense of both services if he wishes.

"Although we charge five cents for each delivery and one cent for every dollar's worth of merchandise charged, the customer pays less than before. We are able to quote lower prices because our expenses are less.

"Here are a few typical items that show how the customer benefits by the plan:

	Old prices	New prices
4 bars soap	$ .20	$ .16
1 pound of coffee	.35	.32
1 pound of rice	.10	.08
5 pounds sugar	.40	.35
1 pound sirloin steak	.32	.28
Total	$1.37	$1.19

"If the goods, at the new prices, are both charged and delivered, the customer pays two cents for charging and five cents for the delivery. His purchase, therefore, amounts to $1.26, as against $1.37 under our former plan.

"The quality of the merchandise has not been changed under the new plan. Before we adopted this system 85 per cent. of our business was credit, 90 per cent. of the orders were telephoned in, and 99 per cent. of the orders were delivered. The immediate result of our plan has been considerably to alter these percentages."

Much may be accomplished by Women's Clubs, or by concerted action in a community in co-operation with local merchants, so that those who wish the privileges of charge accounts, deliveries and returns may be taxed to support the cost of such service, while those who do not desire to avail themselves of such service may be free from the expense now charged to both.

Conclusions—Reducing Expenses.—It is easy to advise one to reduce expenses, but to do it is difficult. The average American family should not move into districts occupied by those whose standards are much below their own. "Back to the soil" or "out to the suburbs" is impractical for the majority, and in many cases it is an absurdity to advocate such measures. City-bred men and women, untrained to farm work and farm conditions, are not suited to be farmers or farmers' wives. Life in the suburbs is generally more ex-

pensive than life in the city; rents are higher, carfare is greater in many instances, and for many the time taken going to and from work is prohibitive. Under such conditions suburban life becomes a luxury for the few.

Under these conditions the question of saving becomes almost an insurmountable problem for the average wage-earner. Abnormal conditions in the home, even when the economic situation is normal, create a serious problem, but when combined with the high cost of living, with sickness and financial reverses, the average wage-earner is sorely tried.

Such is the condition that to-day confronts the head of every household, and the student of household management should look the facts in the face so that she may learn the best method to cope with the situation, whether it be in her own family or in that of her parents.

Household Waste a Factor—Any housewife who honestly examines all the facts will be compelled to admit that waste in the average family is one of the contributing factors in the cost of living. Just what per cent. of the family income is lost through needless waste may be hard to determine, but here at least is one leak that demands the attention of every housekeeper.

Household Planning Needed.—The lack of proper planning, and a neglect to make a family budget that will provide for a proper distribution of the income, is another leak that needs to be mended.

There is no doubt that an intelligent effort to keep a practical system of household accounts will result in a very considerable saving for most families, and if combined with a determination to reduce the amount of waste that obtains in the home, the results will, at least in part, offset the rising cost of living.

QUESTIONS

1. What is meant by the phrases "the cost of high-living"? "The high cost of living"?
2. Name some of the luxuries of past generations now considered as necessities; some of the modern improvements in dwellings.
3. Name the things you have which are not absolute necessities.
4. What do you consider a false standard of living?
5. What are the causes of the high cost of living?
6. What is meant by the term "middle classes," by "capitalists," and "Union"?

7. What is meant by a "fluctuating dollar"; in what way are prices affected by the amount of gold?
8. What may the tariff have to do with the prices of retail commodities?
9. In what way may the Trusts operate to raise prices, to reduce them?
10. What natural resources are being exhausted?
11. Should a cash customer receive a lower price than a credit customer? If so, why?
12. Should tradesmen charge for the delivery of purchases? If so, why?
13. Should the "return of goods" privilege be abolished? If so, why?

PROBLEMS AND DEMONSTRATIONS

1. Prepare a table showing current prices of the principal articles of food. Secure these prices from the tradesmen with whom your family does business; if possible, find the prices of the same articles of food during any year between 1900 and 1910, by making local inquiries; by securing State and Federal labor reports.
2. Prepare such a table showing the wages in trades now and prior to 1890.
3. If in 1910 flour cost $7.50 per barrel and $12.50 in 1917, what per cent. did it advance?
4. If in 1906 a workman earned $2.00 a day for a ten-hour day's work, and if in 1917 he earned $2.40 a day for an eight-hour day's work, based on the actual hours of work, what was the per cent. increase of his wages?
5. If in 1917 it cost the workman $3.00 to buy the same amount of food that could be bought for $2.00 in 1906, what would be the per cent. of his increased wages in 1917 measured according to its purchasing power?
6. Ascertain if there are any retail tradesmen in your community, and in your neighborhood, who sell for cash only. If so, are their prices lower than tradesmen who do both a cash and credit business?
7. Ascertain if one or more local tradesmen would be willing to make a difference in price between the customer who pays cash and the one who buys on credit; between the customer who takes purchases home and the one who has them delivered?
8. It is estimated that it costs the tradesmen 2½ per cent. for the delivery of purchases to customers. If the grocer allowed John Smith this discount on his purchases, and in addition 1 per cent. discount for cash, how much would John Smith save during the year if his grocery bill is $40 a month?
9. If it cost a merchant 4½ per cent. of his total sales to maintain a credit system, a delivery system and a "returned goods" department, and his sales amounted to $60,000 a year, how much a month would he save by discontinuing all three privileges?
10. Is a Woman's Club maintained in your community? As a class, address the President of the Club, and ascertain if the Club will not consider an effort to induce local tradesmen either to offer a discount for cash purchases, for purchases taken home by customers, and for the abolition of "returned goods" privileges if they exist, or to make a charge for such privileges.

THEMES FOR DEBATE

Resolved that:

il delivery and charge system are of more value to the house- than would be any saving derived from paying cash and carry- ome one's purchases.
l Storage system is inimical to public welfare.
:ion decreases prices.
ists" increase prices of commodities.
nions are more responsible than Trusts for increased prices.
nd demand are the real causes of high prices.
f natural resources combined with waste in the kitchen are responsible for high prices than are dishonest weights and res combined with food adulteration.
eased supply of gold is directly responsible for high prices.

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PART II

FACTORS IN THE FAMILY BUDGET

CHAPTER X

LIVING CONDITIONS—HOME OWNERSHIP

THE various general financial principles and processes involved in household finance have been examined and we come now to the consideration of the individual items that make up the family budget. In considering Shelter, one must choose a neighborhood in which to reside and schools, churches and transportation facilities should be considered, as well as the character of the people in the vicinity. The location of stores and markets, and the prices charged for necessities and foodstuffs should not be overlooked.

Advantages and Disadvantages of Suburban Life.—One should not overlook the fact that the more desirable the suburb or neighborhood, and the better the class of people living there, the higher will be rents, taxes and foodstuffs. In many aristocratic localities tradesmen have an opportunity of doing business with wealthy families and they fix prices accordingly. Many patrons cannot afford to pay such prices, but are compelled to do so. Again, many wealthy families pay their bills every three to six months, and in some cases only once a year. This is an injustice to the tradesman, who in turn is forced to fix his prices to protect himself, so that in reality the less fortunate families who pay their bills in cash, or monthly, pay their share of his burden.

Many suburbs cannot be reached from the neighboring city for less than a ten-cent fare, and this is an additional tax that must be counted as a part of one's rent. The time lost in traveling long distances to and from work or school is an important factor. Business men often lose two hours a day on trains going to and from work. Suburban life does not always reduce living expenses. More often these conditions make such life impossible to the majority of workers.

There can be no question as to which is more desirable, city or suburban life. Gardens, fresh vegetables, lawns, quiet, cleanness and fresh air make legitimate appeals, but they must be paid for.

The suburbs still represent something of the community life of the smaller towns and villages. Life revolves around the individual home, the church, the lodge, the club and the school. The family becomes a unit in the community; a factor that must be reckoned with, whereas in the city one's individuality is merged with the masses.

Advantages of Living in a House.—The advantages of living in a city house are the same as those gained through suburban life—light, fresh air, and perhaps a garden. A house does give a more permanent feeling than does an apartment. The home atmosphere seems almost unattainable in an apartment. Those who have never known anything different from life in apartments may acquire this intangible homelike feeling, but those brought up in houses instead of apartments, seldom can reconcile themselves to such life. Where there are children there can be no comparison. Children who have been raised without an attic to explore and in which to develop their imagination; without a cellar laden with winter provisions, and without a yard in which to play, have been deprived of an opportunity that can be supplied in no other way. There is a sentimental value attached to a house and its grounds, the worth of which is intangible, but real.

On the other hand, a house means extra work, and extra money costs. There is the cleaning of walks, the mowing of lawns and the care of the furnace. Water-tax generally must be paid by the tenant. These are some of the extra expenses that must be met as compensation for the privilege of living in a house.

Advantages of Living in an Apartment.—An apartment means less work and therefore less service from maids and other help. There is no work placed upon the family in connection with its upkeep. There is no fuel to purchase and no furnace to care for. The lessened work for a housewife is a temptation to every woman. Rent usually includes plenty of hot water at all hours of the day and night. The only extra house expense is rent, gas and electricity. Some of the larger and better apartments generate electricity on the premises and furnish it free to tenants. Some also make their own ice and furnish it free. Vacuum cleaners are also furnished in some apartments. The solution of this problem of house or apartment must be settled according to the needs of the individual family, as well as in relation to income; but one must remember that the rent of an apartment includes many things that in a house would

have to be paid for separately. As a rule it is cheaper to live i apartment than in a house, since one usually takes a house la than the apartment in which one has been living, and social other demands in a house increase living costs.

Economic conditions are such that the time may come when few families in the larger cities can afford to live in a h Until that time comes every family should, while the childre young, make an effort to occupy a house rather than an apartm

Owning One's Own Home—This problem, both pro and has been debated in the public prints many times. Some have to the conclusion that they are just as far ahead through rentin they would be had they owned their own home. Accepting this s ment at its face value, it cannot be disputed that in one case the ant has a bundle of rent receipts to show for eight or ten yea tenancy, while the owner has a house and lot paid for, or tially paid for, besides having had his rent during all these ye

Few people figure, as a part of their cost of ownership, the i est upon the money invested, or the rent they might secure for house from some other tenant. In other words, owners do not rule pay themselves rent.

Real estate dealers expect to have gross returns of about 1 cent. upon their investments as a minimum. A piece of pro costing ten thousand dollars should return *at the least* one thou dollars a year in rent. The expense of such a house might sho following:

Taxes, probably	$ 100.00
Decorating and cleaning per year	75.00
Repairs and upkeep	25.00
Expense	$ 200.00
Net interest on $10,000	800.00
Gross returns	$1000.00

In order to bring in that amount per year, the house would to rent for $1000 a year. In other words, the owner should pay self $83.33 a month rent, but if his property would bring a g rent to some other tenant, say $100 a month, then the should pay himself $100 a month. If he cannot afford to liv house that would cost him that much rent, is it good business t in his own house if that house would bring him that much inc Should he not move to cheaper quarters and save the difference

There is much to be said in favor of owning one's own home. It encourages thrift and habits of economy. It inspires one to laudable ambitions. It makes for good citizenship. Children without its influence are cheated, for the character development secured by growing up in one's own home rather than in one rented is invaluable. Paying for one's home means saving. The capital thus accumulated is not easily lost and the interest returns are as high as could be expected from any investment.

If one has saved five hundred dollars, or perhaps a thousand, many a suitable house may be purchased at a bargain, the balance of the purchase price being secured by a mortgage on the property. By laying aside a certain amount each month for rent, taxes and upkeep, all expenses may be met and a substantial sum accumulated to apply on the mortgage. Instead of a bundle of rent receipts, one will soon find that he has a substantial equity in a modest little home.

Many say, "It is just as cheap to rent as it is to own." If one only considers the problem by the month or by the year, it may be cheaper to rent an apartment than it is to own a house, but when we take into consideration that in one instance there is only ten years of rent receipts to show for the expenditure, while in the other case, one has had the rental of a real home for ten years and at the expiration of that period finds himself the owner of an unincumbered house and lot, it is a different story.

If an initial payment has been made upon a home, in order to find its equivalent cost to the owner, one should estimate the yearly interest both upon the capital invested and the mortgage, together with the taxes and the cost of upkeep, and the sum of these would represent the actual annual cost, or the rent the owner should pay himself. To this should be added a definite monthly amount to apply on the reduction of the principal.

Following is an example:—

A house and lot was purchased for $5000. The purchaser paid 1000 in cash and gave the seller a mortgage for $4000, payable in ve years, with interest at 5½ per cent. per annum. The taxes nounted to $48 a year. Repairs amounted to $25 a year. What m should the purchaser lay by monthly to meet these expenses? other words, what rent should he pay himself?

The purchaser must now provide for the following:

Interest at 5½ per cent. on $1000.00 invested	$ 55.00
Interest at 5½ per cent. on $4000.00 mortgage	220.00
Taxes per year	48.00
Repairs, upkeep and insurance per year	37.00
Total expense per year	$360.00
Rent per month, one twelfth of the above	30.00

In other words, the owner must pay himself $30 a month rent with which to meet his actual expenses in connection with his investment (including an allowance of $55 interest on the $1000 already invested in the house); but this amount does not include anything to apply on the reduction of his $4000 mortgage. While it is true that the $55 interest on his own investment of $1000 represents a saving, and that if desired, this could be applied on the reduction of the mortgage, yet it is too small an annual payment to be effective in reducing the mortgage.

As a rule, mortgages on good property are easily renewed. To pay off this $4000 mortgage in five years would probably require too great an outlay, as it would necessitate an additional monthly payment of $66.66 for five years, or $800 a year for five years. If, however, the owner could pay $400 per year to apply on the mortgage, the burden would not be so heavy, as this would only amount to $33.33 per month. At the end of the first five-year period $2000 would be saved, with whatever interest may have been earned on the same. A new mortgage could then be taken for $2000 and with the $2000 in cash used to pay off the original mortgage. At this rate for the first five-year period the owner would pay as rent $63.33, as follows:

Monthly expense, interest and upkeep as stated	$30.00
To apply on $4000.00 mortgage, per month	33.33
Total monthly expense (or rent)	$63.33

The second five-year period would be figured in the same way at $63.33 per month, but now the owner would in effect be paying himself the interest on the $3000 now invested in the house, or $165 instead of $55 as in the schedule; and at the end of the second five years the mortgage would be paid in full.

With the property now clear from incumbrances, the question arises as to the amount an owner should pay to himself as rent. The first answer to this question is that *an owner should lay aside as rent each month, the proportionate amount of the yearly expense of up-*

keep, *taxes, insurance and interest upon the full amount of his investment in the property.*

In this particular illustration, the first set of figures gives $360 a year, or $30 a month, which is the minimum amount of rent the owner should pay himself as rent after the mortgage has been liquidated. He now has $5000 cash invested in the property instead of $1000, as was the case when it was purchased. This money would earn interest if placed in a bank or in any other good investment, therefore it should earn interest when invested in a home.

The second answer to this question is that if the property could be rented for more than the monthly cost, which in this illustration is $30, then *the owner should pay himself the actual amount of rent that he might secure from some other tenant.*

If the property would rent for $40 a month, that is the amount the owner should pay himself out of his wages or salary; but if he cannot afford to do this, he should move into a cheaper habitation and rent the other one. This $40 would then represent upkeep, taxes, interest upon the actual money invested, and a balance of ten dollars a month as net profit on ownership.

Owning an Apartment Building.—Conditions vary to such an extent that it is somewhat difficult to give figures that would prove conclusively the value of investments in apartment buildings.

Some have tried purchasing or building a two-apartment house, living in one apartment and renting the other, but it is generally understood that there is not sufficient income to be derived from the rented apartment to pay the cost of upkeep, interest and taxes for the whole investment.

On the other hand, a three-apartment building is said to be large enough to give the owner a home rent free and provide enough to pay the expenses of the building, but little if anything would be left to apply on the principal.

An open letter to a Chicago newspaper recently asked for advice as to whether it would pay to buy a furnace-heated flat for $18,000, the maximum return for rent being $2000. An experienced apartment house owner answered the question in the negative, stating that such an investment could only be justified if the buyer were certain of a large increase in the ground value.

His figures to prove his assertion may be a help in determining similar problems. Expenses he gives as follows:

ANNUAL EXPENSE FOR A FURNACE-HEATED FLAT COSTING $18,000 IN THE CITY OF CHICAGO

Taxes: 2 per cent. on an assessed valuation of $15,000	$300.00
Interest: 5 per cent. on a mortgage of $12,000	600.00
Coal: For hot water and furnace	250.00
Gas: For halls and basement	25.00
Water Tax:	40.00
Janitor: At $10.00 per month	120.00
Insurance: Fire and glass protection	100.00
Loss: From vacancies, 10 per cent.	180.00
Repairs: Including decorations	200.00
Sinking Fund: To reduce mortgage 1½ per cent.	180.00
Total expense per year	$1995.00
Total Income	$2,000.00
Total Expenditures	1,995.00
Net Return to Owner	$ 5.00

It must be remembered that the owner has $6000 of his own money invested, over and above the mortgage, and that the only interest he receives for this equity is $5 a year. If nothing was allowed for a sinking fund, the total expense would be reduced to $1815, which would leave a balance of $185 for interest on the $6000 equity, which would only represent a return of a trifle over 3 per cent.

The only hope the owner could have for a good return upon his money would be the possible rise in the value of the ground upon which the building stands. In such a case he might be able to raise his rents, or sell the building at a fair profit.

Real Estate Mortgages.—Most mortgages on residences are seldom paid off in full by the original owner. Business men constantly borrow money with which to carry on and expand their business, and it is no disgrace to carry a mortgage on one's home. Oftentimes one can thus invest money safely and at a good profit. If money can be borrowed on a piece of property at 5½ per cent. and that same money be safely invested at 7 or more per cent., then the wise thing to do would be to mortgage the property. If a man can make 10 per cent. on money, and do it safely, he would be foolish to use that money to pay off a mortgage drawing only 5½ per cent.

Forty per cent. of an original building loan, with perfect safety may be retained as an incumbrance upon a piece of property.

One should never mortgage a home to pay outstanding debts or for luxuries of any kind. Such money should only be used for productive purposes, or to aid in the purchase of the home itself.

Sinking Fund.—It may be good policy to provide a sum

y apportionment from the income *as a sinking fund,* from
to pay off the mortgage. These payments can extend over
period of years, so that the monthly apportionment shall
felt. By the time the purchaser has reached the age of 55
paying interest may become a burden and old age should
burdened with a mortgage upon the home. (See Amortiza-
ble, p. 337).

t of Loan.—Real estate dealers usually charge a commis-
r making loans. In Cook County, Illinois, the amount of
sion has been agreed upon by real estate dealers. This
sion amounts to from one to two and a half per cent. of
e of the loan. The commission on a $5,000 loan at 2½
t. would amount to $125. The interest on the original loan
es to the investor. Other charges in connection with mak-
eal estate loan, consist of the making of an abstract with
rney's opinion as to the title of the property; or in place
bstract a Guarantee Policy or an abstract under the Torren's
which guarantees the title to the investor, as explained in
chapter. Recording of the mortgage, releasing of old
ges if any, and the payment of back taxes are all charged
he borrower.

m Homes.—The rural or farm home brings in many con-
peculiar to itself. Usually the farm is the source of income
e family life centers about its possibilities. Each member
family is normally an active factor in getting that income.
arm home presupposes a house, not an apartment, but the
g is not always valued or taxed separately from other build-

farm house may be owned or rented. It may have no sup-
convenience, and its rent, insurance, etc., are a small part
farm costs. Therefore, for the farmer's family, the primary
shelter and its upkeep are comparatively low. Fuel may
ly labor, most of the food should be of home production, so
ese necessities of the budget are not so evidently separate
e each of these expenditures means the exchange of money.
the modern, progressive farmer and his wife should find
estimating their family's cost of living aside from that of
k or the farm management.
house itself demands special conditions which relate them-
o the farm-workers and their work. There should be some

place where they can discard overalls and rubber boots, wash and prepare for meals, without entering the kitchen. More storage room for food supplies may be needed, especially for milk, dairy products and the winter vegetables, and such storage must not endanger health, nor the quality of the produce.

The principles of sanitation, of economy, of business finance apply as forcibly to the farm home as to the city or town dweller, but their application concerns different practical conditions.

QUESTIONS

1. What are the principal factors to be considered in choosing a neighborhood in which to reside?
2. What are some of the advantages of suburban life? of country life? of city life?
3. Does a house take more work to maintain than an apartment? If so, in what way?
4. What are the advantages, if any, of owning one's own home?
5. Which do you think the cheaper, owning one's own home or renting? Why?
6. Should an owner living in his own house pay himself rent? If so, why?
7. What expenses not paid directly by a tenant does an owner have to meet?
8. What is a real estate mortgage?
9. What is an "abstract of title"?
10. Where do deeds and mortgages have to be recorded, and why are they recorded?
11. When may one be justified in mortgaging a home?

PROBLEMS AND DEMONSTRATIONS

1. If your family owns a home, ascertain the amount of taxes on the same.
2. Ascertain from a real estate dealer what percentage of the value of a residence would be considered the basis for a real estate loan?
3. Find out how much interest you would have to pay on such a loan?
4. What commission if any?
5. What would be the other expenses incidental to the making of such a loan?
6. Mr. Osborn renewed the mortgage of $2500.00 on his house at 5½ per cent. interest, paying the broker 2½ per cent. for making the loan. How much did the broker receive?
7. How much was the yearly interest?
8. Adding the commission to the interest paid the lender of the principal, what did the total annual interest represent?
9. If living at the county-seat of your county, arrange with some member of your class, or with the entire class, to visit the office of the Recorder of Deeds, and ask him to explain the duties of his office.

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CHAPTER XI

RENT AND WATER SUPPLY

Rent.—We apply the term "rent" to the money we pay a land-'d for the use of his property. In actual practice, however, it :en has a wider meaning, for the rental of an apartment includes iitor service and usually heat. For the man who lives in his own me, the term should also be made to cover the amount which he uld secure from some tenant for the rental of that house.

Few people who own their own homes figure as a part of the st of living the rental they could secure for the house in which ey live. In other words, they fail to pay themselves rent. Many) not even allow for the interest on the principal which they have ivested in their home. This is an economic mistake, as will be iown later.

The subject of rent cannot be intelligently discussed in a general ay, as the problems involved in the rental of a house are entirely ifferent from those pertaining to the rental of a steam-heated partment. Location is another factor to be considered, as con-itions in large cities are different from those that obtain in the uburbs, in small towns, or on farms. For such reasons, these actors must be considered separately.

The Apartment.—Apartments are more peculiar to the city han elsewhere, although many of the smaller towns now have their lats and apartments. Such buildings provide for a varying number f suites of rooms, from two to as many as seventy or more, the iumber of apartments representing the number of families ccommodated.

Rental of an apartment in the cities is usually based upon the oom as a unit. Seven to ten dollars per month, per unit or room, as been the standard price for apartment rentals. A four-room artment, for instance, would probably cost not less than thirty forty dollars a month. Sun-porches, sleeping-porches, bath-oms, entries or reception halls, and closets are not counted as its. Recently, landlords have been increasing the rentals of new artments, four-room apartments in desirable neighborhoods bring-forty-five to fifty-five dollars per month.

In cities in which elevator service is more or less common, the rental for elevator apartments is higher than for apartments without that service. For example, minimum figures in New York in the University district, have been $7 to $8 and up, per room, in non-elevator apartments, and $10 to $12 and up in those buildings having elevators, but higher prices have recently become more common.

Aside from a fixed standard of measurement for estimating rent, landlords take into consideration the desirability of the neighborhood, the age and the condition of the building. Especially desirable or fashionable neighborhoods, and new buildings, usually increase the minimum standard of rentals from five to fifteen dollars or even more per month. On the other hand, if a neighborhood has deteriorated, or if a building is old and run down, rents are usually lowered.

The demand in cities seems to be for small apartments of from three to five rooms, and recently a great demand has come for one- and two-room apartments. Owing to this demand, the rental asked for these smaller apartments is often higher per room than that asked for the larger flats.

Families with young children should generally choose a house. Children should have more freedom than is feasible in an apartment. The high cost of living is causing many apartment dwellers to economize by moving into smaller apartments. Many single men and women prefer to maintain a small apartment rather than to rent a single room in a boarding-house. Again, children leaving home frequently leave the parents alone, and the small, heated apartment becomes ideal for the "old folks." These conditions have brought the demand for the one-, two-, three-, and four-room apartments. These small flats make light-housekeeping possible; in fact, in most of them kitchen facilities are provided, beside a bathroom.

Rents vary in different cities. In New York City they are much higher than in Chicago, while in Philadelphia they are lower than in Chicago. Again, in University towns rentals are usually high, as they are in the better city suburbs. Local attractions, congestion and the rapid growth of cities all add to the rent-roll of the landlord. Transportation is another factor that affects rent.

Small vs. Large Apartments.—A two- or a three- or even a six-apartment building has some of the advantages of a small community. Interchange of social life among tenants is more possible

nd more of the home atmosphere is retained than in a large build-
ng, in which are housed thirty or more families.

Better janitor service is generally obtained in the larger build-
gs, as one or more capable janitors and perhaps an experienced
ngineer are constantly in service. Heat in such buildings is usually
rnished all night during cold weather. The smaller buildings are
ually cared for by janitors who attend other buildings.

Most tenants dislike to live in apartment houses, if the owner
o resides in the same building. They feel that being on the
ound at all times, the owner or his family may have a tendency
criticise, or to form cliques among the tenants and that oppor-
nities for disputes with the owner will be more frequent than if
resides elsewhere.

What Apartment Rent Includes.—People living in houses
en gasp at the thought of forty, sixty, and seventy dollars rental
an apartment; but they do not consider that in paying rent
an apartment, one does not pay for shelter alone, as rent in-
des a number of items not included in the rental of a house.
llowing are some of the items furnished without separate charges
h the rental of many high-class apartments:

1. **Fuel and heat.**
2. **Janitor service.**
3. **Hot-water.**
4. **Ice-box.**
5. **Gas-stove.**
6. **Vacuum cleaner.**
7. **Ice.**
8. **Electricity.**
9. **Water-tax.**
10. **Machine ironers and clothes driers.**

Numbers six, seven, eight and ten are sometimes furnished to
tenants, but the other six items are always furnished in steam-
ted apartments. To the value of these items must be added
lessened cost for upkeep and for help in doing household work
n compared with the rental of a house. If the separate cost of
e items were deducted from the rental of the apartment, the
parison would not be in favor of the house.

What House Rent Includes.—The rental of a house, as a rule,
not include any of the foregoing items. In the rented house,
tenant usually must pay the water-tax, which would seldom
ss than a dollar a month. Fuel of course must be purchased
e tenant, and gas, electricity and ice are never furnished free.

The care of the furnace, the lawn and the upkeep of the prem ises, the emptying of ashes and the cleaning of walks in winter mu all be done at the expense of the tenant, which would represe janitor service, if it were hired. A house-janitor usually arrang to care for several houses in a neighborhood, charging from $3 to $ per month for each furnace according to the extra work required him, other than the caring for the furnace.

The work within the house is much more than what would required in an apartment. If a maid is necessary to help wi the housework in the rented house, her services may usually dispensed with in an apartment.

Following are the actual figures showing the cost of living in certain ten-room house in a first-class Chicago suburb:

Rental per month	$95.00
Fuel, average per month for 12 months	15.00
Janitor service per month for 12 months	3.00
Hot-water heat (gas) per month	3.00
Water-tax per month	1.50
Total per month	$117.50

Here is an average fixed monthly expenditure that cannot avoided. The janitor was paid $6 per month for six months, or average of $3 per month for twelve months. The fuel bill as sho has been distributed over the entire year in order to estimate monthly average expense. The janitor service does not include care of the lawn in summer, care of garden or the cleaning of wa in winter. Such expenditures should be added to the total gi for the month.

Here again, we have the question of environment to consi In this particular suburb, carfare to the city is ten cents, inst of five as within the city limits. Gas is about a dollar per mo higher, and so is electricity and telephone service, over and ab the city rates. If we add these items to the monthly expense gi we will have the following:

Total rental as estimated in the foregoing tabulation	$117.50
Extra work about the household (charwoman)	8.00
Mowing lawn and cleaning walks average per month	1.50
Excess gas rate of suburb over city rate per month	1.00
Excess electricity of suburb over city rate per month	1.00
Excess telephone of suburb over city rate per month	1.00
Excess carfare from suburb over city rate per month	3.00
Total rent for the month	$133.00

In some suburban towns, as the one referred to in this table, public service utilities are provided by smaller companies than those in the larger near-by cities and the cost of manufacturing gas and electricity is greater, hence the excess cost shown in the table.

Toll calls to the city account for the excess telephone rates.

In this particular case the tenant is the owner of the house. The property is worth between fourteen and fifteen thousand dollars. When the owner rented the place he received $95 a month rent for it, which of course would more than take care of interest and taxes. Now he must either pay himself the $95 rental or charge himself with the taxes and interest upon the money invested.

One seems to expect more room in a house than in an apartment. Few people living in a ten-room house would expect to rent a ten-room apartment. An eight-room apartment probably will serve the needs of a family accustomed to a ten-room house. The rent of an eight-room apartment in a large city amounts to from eighty to one hundred dollars a month. This shows considerable saving over either of the total figures given for the house rental. Houses and apartments can, of course, be secured for very much less money than the foregoing, but the illustrations given are for modern, high-class houses and apartments in desirable neighborhoods. In conclusion, one's needs can usually be met in a smaller apartment than in a house, and at a total saving of from fifteen to forty dollars a month.

The disadvantages of apartments particularly as regards restricted opportunities for children must not be lost sight of, while recognizing the conveniences they afford for the housewife and the saving in service.

Transportation.—There are often several factors that add to one's rent that are not included in the money paid the landlord. One of these factors consists of expenditures for transportation. Many economists agree that this expense should be charged under "rent." This is especially true, if suitable living quarters may be obtained in a section in which transportation is not necessary to and from work, school, church, and markets, but for various reasons beneficial to the family one prefers a location further from the heart of the city. Transportation then, in such cases, simply means that much more added to the rent.

Other Items That Add to the Rent.—Many are delighted to find that perhaps in a choice location rents may be almost as

reasonable as they are in less desirable neighborhoods sometimes true, but it must not be overlooked that in ma desirable neighborhoods, all foodstuffs are generally pr higher than they are in other quarters of a city. This a cost of living and indirectly it means that one is paying much more for rent.

Another factor under such conditions is the fact tha and other members of the family feel compelled to dress l they would in more humble surroundings. This item al no inconsiderable addition to the rent.

Moving and Storage.—Many city people form the hal ing every year or two. Although in some cities the charg ing is regulated by the city council at so much per hour, dollars is about the minimum charged for moving the aver Those who move, do not generally think of adding this their rent as they should do.

In moving, there is more or less wear and tear upon the besides actual breakage. New quarters usually mean an rug or two; new curtains, and other furnishings, as man things that may be on hand do not fit the new home, in moving from a house to an apartment or an apartment These incidental expenses of moving, added to the dire expense, may equal a month's rent. Extra labor required factor to be considered. Suppose a family paying a fifty dollars per month, decides to move to an apartme forty-five dollars per month. The difference amounts to lars a year. The direct cost of moving would not be less t dollars. Deduct from the remaining thirty the extra e new fittings and furnishing, the wear and tear upon and the outlay for labor, and little if anything will be le be counted as a saving, unless the family remain at the ne for a term of years. Such a move for only one year must upon some other ground than dollars and cents.

If one moves from a large to a small apartment, ther to be excess furniture that cannot be used or stored i apartment. If this furniture be placed in a warehouse monthly expense of anywhere from two dollars up. This be assessed against one's apportionment for rent. If return is pitiably small.

The above are a few of the factors generally ignored

in considering the matter of shelter, but they exist and are a charge or a tax upon one's income. As they must be paid for, the only proper place to apportion such expenditures is against "Rent."

What a Lease Means.—A lease is a *contract* for the letting of a piece of property by its owner, who is called the *lessor,* to a tenant or renter, known as the *lessee,* for *a specific period of time,* in consideration of *a stipulated rental,* usually payable in monthly instalments, and in advance.

Legally, the owner of a piece of land is generally the owner of any building or structure upon it, although the ground rent system is found in some communities. Real estate mortgages are incumbrances upon buildings because they have been erected upon or are standing upon the land mortgaged. In other words, a house or building is *personal property* and not real estate, except in its relation to the land upon which it stands.

In leasing a house, the owner leases the lot upon which the house stands and the renter is of course entitled to the use of that lot during the term of the lease. On the other hand, if a barn, a garage, or other outbuilding in no way a part of the house, stands on the lot, or there be room for a garden, the lease of the house does not necessarily include the lease of such other buildings, or the garden plot, unless specifically included in the lease.

Should a tenant erect upon such a lot a garage, a barn or any other building, it would legally become the property of the owner or lessor at the termination of the lease, and the lessee would have no right to move it from the lot, to sell or to rent it without the written permission of the owner of the lot. It has virtually become a part of the lot. For this reason, tenants should never erect any expensive structure upon rented property, without the written consent of the owner and his permission to remove it at the expiration of the lease.

The same principle applies to the attachment of expensive apparatus to the house itself, such as a gas range or an automatic gas-heater or hot-water heater. Globes and bowls attached to gas fixtures if furnished by the tenant may be removed by the tenant, but if the tenant attaches new gas or electric fixtures, they become a permanent part of the house, and may not be removed at the expiration of the lease without the consent of the lessor.

Termination of a Lease.—In some places the law requires that a tenant give a landlord a written notice that he intends to

move at the expiration of the lease. In Chicago a tenant whose lease expires May first must send a written notice of his intention to move May first, not later than the previous first day of March. If this is not done, the landlord may, if he chooses, hold the tenant to the payment of another year's rent, *whether the tenant moves or not.* This clause in leases may not be taken advantage of often by landlords, but tenants should know that if a landlord chooses to take advantage of one's negligence in this respect, the law will uphold him. Those who lease property should inform themselves as to the law governing leases in the state in which they live.

General Provisions of the Lease.—A lease is a contract, and violation of any of the terms of a lease, either by the landlord or the tenant, makes action in court possible, as would the breach of any contract.

The conditions and terms of printed leases originate with owners of real estate and landlords, so that it is natural to expect that all of the interests of the owners or lessors have been covered by these printed forms, which are so carelessly and thoughtlessly signed by tenants. Very few provisions in the interest of tenants are expressed in any of these printed forms. The tenant by his signature binds himself to the articles that make up the lease, thus protecting the lessor, or owner; while as a rule the tenant must look to the courts to protect himself against many contingencies not mentioned in the lease.

In apartment leases the clause covering the heating should be noted carefully. Some leases do not include a heating clause, or if it does, the landlord or lessor may agree to furnish heat from October first to May first, and yet climatic conditions often exist, either before October first or after May first, that would make an unheated apartment untenable, especially if sickness existed in the family. While the law of a state undoubtedly would protect a tenant if the landlord refused to grant heat under such conditions, and the tenant moved as a consequence; yet it would only be as a result of a defense offered by the tenant in court.

A landlord can be held only by the provisions mentioned in the lease, unless by his own act or negligence in relation to the maintenance of the premises he consistently violates the law by making the property untenable, dangerous to public health, to morals or to safety.

Failure to pay the rent due, usually makes the tenant liable

to ejection according to due process of law. While a tenant has many rights under the law, they are seldom mentioned in a lease as a part of the contract. As a consequence, the tenant must fight for such rights in court if a landlord refuses to grant them.

A tenant cannot move from a piece of property he has rented and by so doing end his liability to the landlord under the lease, *before the expiration of the lease.* The tenant may be held legally for the balance of the rent during the unexpired portion of the lease, even if the tenant does not occupy the property.

Some leases specifically forbid subleasing by the tenant to a second party before the expiration of the original lease. If a tenant desires to sublease he should secure the written permission of the lessor, but unless the original lease is surrendered to the original tenant, he will continue to be held for the rent of the sub-tenant until the expiration of the lease.

Tenants are responsible to the lessor for damage done to the property leased during the occupancy of the premises, unless such damage was unavoidable or the result of a so-called "act of God," such as fire from lightning, or damage from a wind-storm.

The terms of every lease should be read carefully before the tenant affixes his signature, and if specific terms are agreed upon by both parties, they must be written into the lease before it is signed in order to make them binding. Both lessor and lessee sign the lease in duplicate, a copy being kept by each party.

Before attempting to break a lease, or move from a leased house or apartment, a tenant will save much trouble and expense by first consulting an attorney. Under the terms of almost any lease the odds are in favor of the lessor or owner, while the tenant's rights are generally represented by the laws of the state, and to secure those rights, court action is necessary. One cannot be too careful about signing leases without being familiar with their provisions; but once signed, do not attempt to evade any of the terms of a lease without the advice of a competent and honest attorney.

Term of Leases.—Leases in cities usually expire the first day of May and the first day of October. This condition works a hardship upon the landlords and it is inimical to the best interests of the people at large. There is a strong tendency among real estate dealers to break this ironclad expiration feature of leases, making it possible to have leases expiring in any month of the year. In

some cities monthly rentals obtain for cheaper apartments or flats, and yearly leases for the more expensive.

Fixed periods of expiration of leases assist perhaps in making most city dwellers become migratory citizens. At any rate, apartment families are more restless than those living in houses. New apartments with all the late improvements are a great inducement to move from an older apartment, and often times more money is spent for rent than would be the case if the family were moving into a less modern building. This increase in the rent with the added moving expenses cannot always be afforded. The great demand for new apartments forces down the rental of the older apartments and decreases their value. Constant moving prevents a family from either acquiring or from maintaining the sense of home. For this reason apartment-living has robbed many families of the home-like atmosphere every family should enjoy. If a family would remain for a number of years in the same building, and if the landlord would do his part in promoting permanency in leasing, the migratory flat-dweller might regain his lost sense of home, and the family once more might take its place in the neighborhood community life. At present community interests are little developed in the apartment districts of large cities.

The expiration of leases occurring only once or twice a year means that if a building is not rented by the first of May or October, it is apt to remain unoccupied until the next expiration period. There is no doubt but that this system, together with the migratory habit, works an economic harm to both landlord and tenant, and social harm as well. These questions deserve the earnest attention of legislators and civic workers.

Investigations to be Made Before Buying or Renting.—Frequently one selects an apartment or a house without thoroughly examining all of its appurtenances, its possibilities and its handicaps. None but a trained observer can go through a place and at the first, or even after the second visit, catalogue all of its vital points and all of its deficiencies. For this reason, one should make a list of all that may be desired in a model house or apartment, and in looking over property, these items should be checked from the list, or properly marked, as existent or non-existent.

Such a list is appended herewith as a suggestion. Doubtless other factors might be added.

LOCATION AND EXTERIOR

These are the first points to be decided upon:

Location:

1. Character of neighborhood.
2. Convenience to markets.
3. Distance from schools.
4. Distance from churches.
5. Convenience of transportation.
6. Probable development of neighborhood.
7. Proximity to transportation, coal yards, factories, etc.
8. Prevailing winds; nearness to still water that may furnish mosquitoes.
9. Is there a generous and safe water supply with sufficient pressure?

Exterior:

1. How many exposures?
2. Are any rooms deprived of sunlight; of sufficient air?
3. Do any rooms open on courts?
4. Which exposure does the house face?
5. Is there a front porch; a sun porch; a sleeping porch?
6. Are there screens and blinds?
7. Are there storm windows and doors?
8. Does the exterior need painting?
9. Does it need repairs?
10. If fenced, is the fence in good repair? If steps, are they strong?
11. Is there a front yard? a back yard?
12. Is there sufficient space to dry clothes?
13. Is there space for children to play?
14. If a house, where and in what condition is the cesspool, if any?
15. Are there good cellar windows?
16. Does the ground slope away from the foundation?
17. Is there a sill-cock for hose?
18. Are the window panes whole and secure?
19. Are the chimneys in good condition?
20. Examine the roof and gutters.

INTERIOR

Kitchen:

1. Is it too large or too small?
2. What about air and light?

3. What is its exposure?
4. Is the pantry a long distance from the dining-room?
5. Has pantry an outside vent or window?
6. Is ice-box in pantry or kitchen?
7. Must the iceman cross kitchen to reach pantry?
8. Is there an outside entrance to ice-box?
9. Are there any package receptacles opening on outside?
10. Is there an incinerator for garbage in basement?
11. Is there any kind of a garbage vent in floor or wall?
12. Is there a laundry chute?
13. Is there a sliding opening or window between pantry and kitchen?
14. Between pantry and dining-room, or
15. Between kitchen and dining-room?
16. Is the sink low or high?
17. Has the sink two drain boards?
18. If not, is the drain board on the left side of sink?
19. Is there sufficient room between sink and stove?
20. Is there space for a kitchen table and chair?
21. How many steps from stove to sink, sink to table, table to stove, table to pantry, dining-room to refrigerator or cellar door?
22. What is the character of the floor? Is it rough? cracks?
23. Must it be covered with linoleum?
24. What kind of a range is in the kitchen? Are all flues cl
25. Is it in good repair?
26. If needed, is there a good zinc under the range?
27. Is the hot-water boiler jacketed?
28. Is kitchen equipped with both gas and electricity?
29. Has pantry a separate light?
30. Is there a butler's sink? in good condition?
31. Is there a place for a flour barrel?
32. Is there a good kitchen porch or wide step?
33. Has it a separate light?
34. Are there any closets off kitchen?
35. Is there a well-situated and ventilated toilet?

Cellar:

1. Is there a good well-lighted storeroom?
2. Is there a vegetable and a fruit room?

If not, is temperature of cellar or store room suitable for fruit and vegetables?
If a house, is there an entrance to kitchen from cellar? to cellar from yard?
If a house, what kind of a furnace is there?
What provision is there for hot-water?
Must fuel and ashes be carried in and out through the cellar door?
Are there bins for heating- and cooking-fuel?
Can cellar windows be opened? Are they securely screened?
If maid's toilet, is it in good condition and ventilated out-of-doors?
Is the floor in good condition?
Are the stairs safe?

...as:

Notice the exposure of each.
What about light and air? Are there two windows giving cross-ventilation?
Note size of each room.
Will they hold necessary furniture and allow doors to swing?
Is there room for bed without placing it across a window?
Has space been left for a dresser?
For a chiffonier?
Are there lights over both?
Are there any mirror doors?
Is there sufficient closet space?
Are closets lighted?
Is there a window in closets?
Are there sufficient shelving and hooks in closets?
What is the condition of floors, of walls and ceiling?
...s there sufficient radiation for heat?
Will your rugs fit the rooms?

...oom:

...hat is the exposure?
... there a built-in sideboard?
...ill it interfere with your furniture?
...e there any side lights? A center light?
...w many windows?
...here a porch off dining-room?
...oor between dining-room and kitchen or pantry a swing-...g one?

8. Is there a butler's or serving pantry off kitchen?
9. Will the room hold your furniture and allow passage ar[illegible] the table?
10. Will your rug fit the room?
11. What connection has the room with other rooms?
12. May it be closed off from them by folding doors?

Living-room:

1. Note the size in regard to rugs and furniture.
2. Is there a gas log?
3. A wood and coal grate?
4. If so, is opening into chimney large enough?
5. What is the exposure?
6. How many windows?
7. Are there side lighting fixtures, center fixtures?
8. Is it equipped with both gas and electricity?
9. If there is a sun-parlor, are there separating doors?
10. Is there good space and light for a piano? a desk?

Bath-rooms and Toilets:

1. Is the plumbing modern? It may well be tested.
2. Note the condition and character of tubs.
3. Is furniture in bath-rooms well arranged?
4. Are toilets in good condition?
5. Are there medicine closets in bath-rooms? Towel stora[illegible]
6. Do any of them connect with more than one bedroom?
7. Is there a maid's bath-room?
8. Is there a lavatory and toilet on main floor?
9. Are there toilet facilities in basement?

Laundry:

1. Does the laundry have three tubs? Are they high enough?
2. Is there proper light at tubs?
3. Is there electric light and power outlets? Are these at safe distances from the tubs?
4. Is there a dry room?
5. Is there room for washing machines, machine ironers, etc.?
6. Is the floor cement or wood?
7. Are there hooks on walls?
8. Is there a laundry stove, or a place for one?
9. How is the drying-yard or roof reached?

alls:

1. Note size in relation to rugs or carpeting.
2. Is there a clothes' closet in front hall?
3. Is there a linen closet in upstairs hall? (If house).
4. How is it lighted?
5. Note position of stairs, if any, to hall?
6. Is there a vestibule between front hall and porch?
7. Are there radiators in halls?

her rooms:

1. Note all other rooms for size, exposure, light, etc.
2. In what way may they be used?
3. Will they require new furniture?

n General:

1. What is condition of shades in all rooms?
2. Will new curtains be required?
3. Will any new furnishings be necessary?
4. Are there any awnings needed or furnished?
5. What system of heating is used? Hot air, hot water, steam, or combination?
6. Note carefully the radiators in each room, and see if they have enough radiating surface. The registers—have they screens?
7. What is the reputation of janitor for service (if apartment)? Does the landlord live in the building, if an apartment? What do other tenants say of him?
8. Ascertain from other tenants, if any, whether building is kept properly warm during cold seasons.
9. What is the period for which the landlord agrees to keep the apartment heated, according to terms of lease?
10. Is hot water furnished the year around?
11. If a house, have it understood who is to pay water-tax.
12. See that any special agreements are written into the lease.
13. See that all repairs and decorating agreed upon are made if possible before moving in, or before paying a full month's rent in advance.
14. If the place in view is rented, will any furniture have to be stored?
15. Is there an attic (if a house)?
16. Are there windows in the attic, if any?

6. The Smith family lived in a house of six rooms for which they paid $35.00 rent per month; $1.50 water tax per month; and $15.00 per month for coal for six months of the year. What price could they afford to pay for a steam-heated flat? Could the Smith family save anything by moving into a steam-heated flat, and if so, how much? What per cent. would the saving represent over and above the cost of living in their house?
7. In your community or state, is it necessary to give a landlord a written notice that the tenant expects to vacate the rented premises at the expiration of the lease? If so, how long before the expiration of the lease must the notice be sent? If such notice is required and not sent, in what way may the landlord hold the tenant responsible?
8. Mr. Jones rents an apartment for one year at $50,00 per month and the landlord agrees to give Mr. Jones a concession of one month's free rent. How much per month does Mr. Jones pay for rent?
9. The landlord offered Mr. Jones a concession of two months' free rent at the same price for a two year lease, or a monthly rental of $47.00 on a three year lease. Which was the better proposition in actual dollars and cents?
10. How is the water-tax on your home estimated?

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CHAPTER XII

FUEL

THE subject of fuel for heating and lighting a house and for cooking the food deserves careful consideration by all interested in reducing the cost of living.

HEATING

There are four principal methods of heating a house. The simplest form consists of a stove. The hot-air furnace is the first improvement over the stove. We also have the hot-water and the steam-heating systems. Besides these there are combinations of two or more, as warm air with hot water or steam. All but stoves illustrate a central heating system, by which both the labor of care and the dirt are outside of the rooms and centralized. Fireplaces may be used alone or in connection with any system.

Stoves.—While it is possible to heat a house healthfully by stoves, if intelligently managed, they are usually wasteful and unsatisfactory. It is hard to heat more than one or two rooms with one stove. Much labor is entailed in running stoves, and household furnishings suffer from dust, ashes and smoke, while, with coal fuel there is a real danger from escaping gas. The heat is seldom effective throughout the room, and through lack of constant attention which any stove demands the heat is too uneven for health, although self-feeding stoves have done much to eliminate this objection.

Furnaces.—Furnace or warm-air heating means the heating of a house by fresh cold air which is brought into an enclosed space about the fire-box. This heated air is then distributed through large pipes to the different rooms, through outlets or "registers" in the floors or base-boards.

Some of the objections to this method of heating are the following:

1. It is more or less difficult to equalize the intake of cold air, especially during a high wind.

2. It is difficult during gales to heat exposed rooms, as the hot air must be forced up from the furnace, through long stretches of pipe, *against the wind.*

3. If ashes are being emptied in the cellar, they often enter the living rooms through cracks in the floor or around the registers. The hot air sometimes carries with it coal gas or smoke which gain access to the air chamber. Careful management will eliminate these objections.

4. Furnace heat is not constant, but varies with the fire. If the fire dies down, the heat rapidly diminishes, as with a stove. This is not so quickly evident with hot-water heating.

5. Unless well-managed, the air is overheated, which means insufficient moisture and consequent ill effects on all living things and on furnishings.

The principal factor in favor of the furnace is its low cost of installation as compared with other systems, but the disadvantages in its operation far offset this initial advantage.

Steam.—Steam-heating is generally found in apartment buildings and large houses. This system consists of the generation of steam in a boiler, the steam being transmitted through pipes into radiators. Some of the disadvantages of this system consist of the following:

1. Original cost of installation.

2. Requires more than ordinary skill to operate.

3. It is hard to regulate the temperature of rooms without the aid of a thermostat. Rooms become either overheated or underheated.

4. The escape of steam from radiator valves settles upon dusty surfaces and begrimes walls and draperies.

5. Some escape of steam is required to properly humidify the air. Steam-heat proves to be a very dry heat.

6. If the fire dies down, as at night, or goes out in the heater, steam is not generated, the rooms become cold, and it takes considerable time to get up steam again. The same type of objection may also be charged against the hot-air furnace, although heat may be obtained much quicker with a hot-air furnace than with steam.

Hot-water Heating.—Hot-water heating is by all means the most satisfactory method of heating. The whole system of pipes and radiators is filled with water. In the heater this is held in hollow sections or coils in contact with the fire. As this water becomes hot, circulation starts and continues throughout the house.

One of the great advantages of this method of heating is that when the water is once thoroughly heated, the house will remain

warm for hours even after the fire has gone out. Less fuel is needed and the heat is more constant and even than with other systems, and is more easily regulated.

In exposed positions there is a possible danger from the freezing of the water in the radiators. If a house equipped with a hot-water or steam system of heating is to be closed during cold weather, the water supply must be turned off and the entire system drained, else pipes and radiators may freeze and burst.

Size of Radiators.—With either steam- or hot-water heating it is vitally necessary that each room have sufficient radiation; that is, radiators must be large enough for the rooms to be heated. Steam-fitters have worked out a definite relationship between the exposure, window area and size of a room and the number of feet of radiator surface necessary to heat it. Generally, with steam, radiators may be smaller than with hot-water.

Humidification.—"Dry air" takes moisture from the skin, the lining membranes of the body, and injures house furnishings. If there is sufficient moisture in the atmosphere, a room is easily heated. Therefore it may be necessary to provide additional moisture in all heated rooms. Patent humidifiers in the form of zinc receptacles for the top, or to hang on the back of radiators, are on the market. These receptacles are filled with water, the evaporation of which supplies the necessary moisture for the atmosphere. Any receptacle, if large enough, kept supplied with water, placed upon stoves, registers or radiators, will serve the purpose. Area and not depth is desirable for proper evaporation.

Ventilation.—A room cannot be heated without the circulation of air. "Dead air" or still air does not circulate; therefore more fuel is burned to heat an unventilated room than one that is properly ventilated.

A little fire in a fireplace provides the best possible form of ventilator, as there will be a current of air up the chimney. Even when there is no fire the chimney provides an outlet for dead or superheated air and completes a circulatory system whenever doors or windows are opened.

Operation of Heating Equipment.[1]—The following summarizes important points in successful heating:

1. The amount of fuel consumed in heating a house depends on many factors. Some of the factors are within the control of the householder; others are not.

[1]Technical Paper 67, *U. S Department of Interior, Bureau of Mines.*

2. Both convenience of operation and consumption of fuel depend on the system of heating (and ventilation) installed, and convenience, fuel consumption, and the first cost should be considered in making a selection.

3. The heater should be large enough to meet continuously and without attention for periods of eight hours the demand for heat in all weather except the most severe.

4. Heating equipment that burns satisfactorily and economically one kind or size of fuel may not be well adapted to burning another.

5. Ascertain by experiment what fuel and what method of using it are best suited to your needs. As a rule, the effort to obtain this information will be amply rewarded by the saving that will result.

6. Attend to the fire regularly and try to anticipate the demands for heat.

7. Keep the heat-absorbing surfaces of the heater free from soot and dust by regular cleaning.

8. Heating systems often fail to meet the demand for heat in severe weather because of insufficient draft. To supply additional heat, the heater must be able to burn more coal.

9. The more probable causes of insufficient draft are:

(*a*) Chimney not high enough, or having its top too near some tall object.

(*b*) Chimney, smoke pipe, or gas passages of heater clogged with soot or debris, sometimes through the breaking of a partition between two flues in a chimney.

(*c*) Leaky connection of smoke pipe to heater or to chimney.

(*d*) Accidental closing of hand damper in smoke pipe.

(*e*) Clogging of fuel bed by clinkers.

(*f*) Too great a length of horizontal smoke pipe between the heater and the chimney.

The United States Fuel Administration lays down a definite program for household saving of fuel. In midsummer is the time for every householder to begin his fuel duty.

First of All, Clean the Heater.—Clean the range, the heater, the chimneys, the pipes, *at once*. One one-hundredth of an inch of soot is as hard to heat as ten inches of iron are. No householder desires to waste his own or the Nation's tons of coal by heating useless soot.

The householder will fight soot, as soldiers, airmen, and gunners

fight the enemy. He will clean pipes, stoves, and heaters, and *keep them clean.*

While the furnace is having its housecleaning, pipes should be examined for leaks. If the landlord refuses to repair breaks or cracks in the pipes, the matter should be reported at once to the State or county fuel administrator.

How to run the heater after it is cleaned and repaired is the next problem and one that is more important than any other branch of household economy. In the average home 25 per cent. of the coal used can be saved. Most of this saving can be accomplished by *proper damper control,* and at the same time the household may still enjoy the same amount of heat it has been accustomed to having.

General Rules Applicable Alike to Hot-air Furnaces, Steam and Hot-water Plants, and Kitchen Ranges.—1. Be sure there is a *check-draft damper in the smoke-pipe,* besides the turn-damper. This check-draft damper is as important in controlling the rate at which the fire burns as is the throttle of an engine. Open it to check the fire. Close it to make the fire burn more rapidly. Work it. Experiment with it in the daily regulation of the fire. The coaling door was not put on the furnace to be used as a check-damper. Never open the coaling-door to check the fire. If you can not check the fire without opening coaling-door, you need proper dampers.

2. The turn-damper should fit the smoke-pipe loosely and must never be entirely closed. With the average plant it may be kept partly closed most of the time in mild weather, but during severe weather it usually needs to be opened wide.

3. Make use of the lift- or slide-damper in the coaling-door *only to let oxygen in to consume gases* (if you are using soft or bituminous coal) after fresh fuel has been added.

4. Just enough draft, and that from below, checking the draft by *letting more air into the smoke-pipe,* is one of the best general rules. This furnishes oxygen from below, necessary for the consumption of the coal-gases, and at the same time gives time for them to be consumed before being drawn up the chimney. This method also avoids escape of coal-gas into the cellar. To make the fire burn more rapidly, do not open the whole ash-pit door, but the draft-damper in the ash-pit door. Opening the whole ash-pit door supplies air to the fire faster than it is needed for combustion. The air is heated, passes out the chimney, and is so much heat wasted.

5. All heat-pipes in the cellar should be thoroughly and completely wrapped with asbestos or similar covering to prevent loss of radiation.

6. Grates should be cared for properly. A short, quick stroke of the shaker-handle will sift the ashes through the grates. Leave grates in flat position at all times. Keep fire-pot free from clinkers. Clean ash-pit daily, to prevent damage to grates. In severe weather grates should be shaken until a glow appears in ash-pit. In moderate weather a bed of ashes should be carried on top of the grates.

7. Avoid poking and slicing fire-bed. It causes draft-holes and clinkers.

8. Never shake a fire that is low until you have put on a little fresh coal and given it time to ignite. A thin fire wastes coal. Disturb the fire as little as possible.

9. Storm-windows and storm-doors, weather-strips and such protective devices are economical of heat. They should be used.

10. Keep the temperature of sitting-rooms at 68 degrees or less. Rooms where you do not sit are more comfortable if much cooler, as a rule, providing the air is kept a little moist. Get a thermometer—a good one. Use it inside, not hanging outdoors.

11. Keep an even temperature, not more than 68 degrees. It is not economy to allow the house temperature to drop away down at night. It takes just twice as much coal to heat it up again next morning.

12. Turn off the heat in unused rooms as far as possible. Bedrooms should be kept much cooler than living-rooms. Don't try to heat all the rooms all the time. If you have a hot-water heating system, make heavy radiator slip-covers and put them over radiators when not in use. This will prevent them from freezing.

13. Keep pans or open-top jars of fresh water on as many radiators as practicable to keep the air in the home moist.

14. Study the Specific Rules applying to the heating system used in your house.

Hot-air Furnaces—Specific Rules.—1. Provide cold-air drops from upper floors so as to *insure a return circulation* from all rooms *to the air intake* of the furnace.

2. Regulate the window of the cold-air box so as to avoid too great a current of outside air, especially on very cold days.

3. Always keep the water-container in the air-jacket filled with clean water. Moist air heats much more readily than dry air, and is better for health, as well as more comfortable.

. It is advisable to keep a jar of water near one of the first- registers that send out the most heat. Change the water fre- tly, preferably every day.

. Hot-air pipes should have a good pitch upward from the fur- and should be of sufficient diameter. They should also be ped with sheet asbestos. A separate pipe for each room with -damper near the furnace is a good rule. Each pipe should be ed so that certain rooms can be shut off at the furnace when ed.

. Be sure the fire-box is gas-tight. All cracks must be thor- ly cemented or a new section put in before winter sets in. rwise coal-gas will escape into the air-jacket and be carried up tly to the rooms.

. Study carefully the General Rules pertaining to other types eating-plants as well as your own. Notice the "clean-out" and remember why it is there.

Hot-water Plants—Specific Rules.—1. All the water should emptied from the plant and clean water put in at least as often every spring and every autumn.

2. When the first fire of the season is built, as the water is ing heated, use the radiator key to open the air-valve of each diator in turn until all the air remaining in each radiator is owed to escape and water starts to come. Radiators filled with air l not heat. Repeat this operation frequently.

3. Always be sure that water shows in the glass gauge of the ansion tank which is usually located in the top story of the house ve the level of all radiators.

4. Be sure the boiler and cellar pipes are covered with asbestos.

5. Keep heating surfaces of the boiler well cleaned.

FUEL

n the United States, fuel consists of wood, coal, coke, gas oil. Natural gas is used in regions where it is found in abund- or can be conveniently piped. Electricity, while not a material is a source of heat and light.

he coal used is *anthracite* or hard coal, which does not flame kindled, and *bituminous* or soft coal, which does flame when led. *Anthracite* or hard coal contains as much as 98 per cent. n, and as this element lessens in amount, hard coal graduates *bituminous* or soft coal. Wood is used for heating purposes

in grates in the country sections and temporarily during
and autumn. Coke is the residue left after partially burni
coal. Both coke and oil are being used more and more.
words as to the values of these fuels may be useful.

Hard Coal.—Hard coal comes in various sizes, as follow
larger sizes being listed first:

1. Furnace or egg, large.
2. Egg, small.
3. Stove or range.
4. Chestnut.
5. Pea.
6. Buckwheat, No. 1.
7. Buckwheat, No. 2.
8. Yard pea.

The smaller size coal is usually cheaper in price, and pea co
is recommended by government experts for household use. In fi
starting a fire with small coal, the grate needs to be covered wi
a thin layer of ashes until the fire is well settled. When proper
burning, the pea coal makes a compact bed, and if the grate
not shaken too violently there will be no danger of dumping th
bed of coals. Mixing small coal with coke or a larger size co
makes an admirable combination. More heat can be had from thi
size coal and at a less expense than with any other kind or siz
of fuel.

Some "hard coal" contains as low as 80 per cent. carbon, and
is therefore called "semi-bituminous." Hard coal throws out
high heat and burns steadily and slowly, but is difficult to kindle
All burning coal at first throws off gas that is dangerous to health
if allowed to escape into a room.

Soft Coal.—The principal soft coals are those known as East
ern, Indiana, Illinois and Southern Kansas. "Cannel," both th
English and American, is a bituminous coal found in large size
and is principally used in fireplaces. This derives its name fro
a corruption of the word "candle," as its flame gives a candle-lik
light.

Soft coal makes a quick, hot fire, but burns out rapidly.
is harder to hold a fire with it than with coke or hard coal. It
also much dirtier to handle and to use. In price it is cheape
than hard coal. *Lignite* is a form of soft coal of a fibrous or wood
nature. It is sometimes called "brown coal" or "wood coal.

aves an ash resembling that of wood, smells somewhat like peat arning, and its flame is weaker than that of bituminous coal. t of it is found in the western states, principally east of the ky Mountains.

Coke.—Coke gives a very quick and a very hot fire. There is siderable danger of burning out grates in using coke on account its great heat when under combustion. Ashes should be kept the grate to prevent this.

Coke in Chicago is about a dollar less per ton than hard coal. n most places it is equal in price or more expensive than soft coal.

To Find the Number of Tons of Coal in a Bin.—It is well to know the capacity of the coal bins and thus keep a check on the coal as delivered. Rule: Find the number of cubic feet it occupies and multiply by the weight of a cubic foot of coal and divide by 2000.

Example: Average nut coal weighs about 52 pounds to the cubic foot of coal. If a rectangular bin is 5 feet wide and 8 feet 6 inches long and filled evenly to a depth of 4 feet, there will be $5 \times 8\frac{1}{2} \times 4 = 170$ cubic feet of coal, or $(170 \times 52) \div 2000 = 4.42$ tons of coal.

The weight of a cubic foot of various kinds of coal as given in a bulletin of the Anthracite Coal Operators' Association is as follows:

	Weight per cubic foot, lbs.	Cubic feet per ton, 2000 lbs.
Lehigh Lump	55.26	36.19
Lehigh Cupola	55.22	36.02
Lehigh Broken	56.85	35.18
Lehigh Egg	57.74	34.63
Lehigh Stove	58.15	34.39
Lehigh Nut	58.26	34.32
Lehigh Pea	53.18	37.60
Lehigh Buckwheat	54.04	37.01
Lehigh Dust	57.25	34.93
Free Burning Egg	56.07	35.67
Free Burning Stove	56.33	35.50
Free Burning Nut	56.88	35.50
Pittsburgh	46.48	43.03
Illinois	47.22	42.35
Connellsville Coke	26.30	76.04
Hocking	49.30	40.56
Indiana Block	43.85	45.61
Erie	48.07	41.61
Cannel	49.18	40.66
Pocahontas Mine Run	55.55	36.00
Pocahontas Egg Lump	50.00	40.00

Wood.—Wood kindles more readily than coal and makes a quick fire with flame. Pound for pound its heat is less than coal. There is no dangerous gas and under good regulation it gives excellent results. Hard wood such as hard maple is in demand for grates. Pine is a soft fuel, with much smoke, so care must be exercised not to use too much of it in grates, stoves or furnaces, as this smoke clogs the stove-pipes and chimneys with consequent danger of fire. In the large cities, the cost of wood for fuel purposes is prohibitive. In the country, where a local supply is available, it is common.

A cord of wood contains 128 cubic feet, represented by a pile of wood 8 feet long, 4 feet wide and 4 feet high. This is cut into regular lengths and shapes. Variations in length are known as *one, two, three* cuts; different shapes and sizes are known as *cleft, split* and *cracked.* In wood, as in coal, labor must be paid for.

The composition of the soft fuels mentioned is as follows:

	Wood	Peat	Lignite	Bituminous
Carbon	50.0	60.0	65.7	82.6
Hydrogen	6.2	6.5	5.3	5.6
Oxygen	43.8	33.5	29.0	11.8

There is also a small percentage of nitrogen in them all.

Oil.—In some sections oil-burning furnaces have been in use for years and are now becoming more common throughout the country. Crude kerosene is the fuel. Small kerosene heaters are valuable for emergency use.

Gas Burners and Grates.—These are for temporary purposes or for use in mild climates. As heating units they are expensive, except in the few sections where natural gas is available.

The danger from escaping gas is very great and such burners and grates should not be used except with careful watching and especially good ventilation in the room.

Other Devices.—Steam radiators are on the market, which have a small tank in the base, where water is heated by gas-burners. Electric radiators are available, but the price of electricity is usually prohibitive for fuel use.

Comparison of Fuels.[1]—Advantages and disadvantages of various fuels and electricity:

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(1) Technical Bulletin 97, U. S. Department of the Interior, Bureau of Mines.

Fuel	Advantages	Disadvantages
Wood	(*a*) Cleanliness, (*b*) cheerful fire, (*c*) quick increase of heat, (*d*) cheap in some localities.	(*a*) Low fuel value, (*b*) large storage space necessary, (*c*) labor in preparation, (*d*) scarcity, (*e*) does not hold fire long, (*f*) unsteady heat.
Anthracite	(*a*) Cleanliness, (*b*) easy control of fire, (*c*) easier to realize heat in coal than is the case with other coals, (*d*) steady heat.	(*a*) High price, (*b*) difficulty of obtaining (*c*) slower response to change of drafts.
Bituminous coal	(*a*) Low price, (*b*) availability, (*c*) high heat value in the best grades, (*d*) low percentage of inert matter (in the best grades).	(*a*) Dirty, (*b*) smoke produced, (*c*) more attention to fire and furnace necessary than with anthracite.
Subbituminous Coal and lignite.	(*a*) Relatively low price, (*b*) availability (in some regions), (*c*) responds quickly to opening of drafts.	(*a*) Slakes and deteriorates on exposure to air, (*b*) takes fire spontaneously in piles, (*c*) heat value, generally low, (*d*) heat in fuel difficult to realize, (*e*) fires do not keep well, (*f*) gases generated over fire pot sometimes burn in smoke pipe, causing excessive heating.
Peat	(*a*) In general, the same as for wood.	(*a*) low heat value, (*b*) bulkiness.
Coke	(*a*) Cleanliness, (*b*) responds quickly to opening of drafts, (*c*) fairly high heat value.	(*a*) Bulkiness, (*b*) liability of fire going out if not properly handled, (*c*) fire requires rather frequent attention unless fire pot is deep.
Oil	(*a*) High heat value, (*b*) immediate increase of heat, (*c*) cleanliness, (*d*) small storage space necessary.	(*a*) High price, (*b*) difficulty of safe storage.
Gas	(*a*) Ease of control, (*b*) cleanliness, (*c*) convenience, (*d*) immediate increase of heat.	(*a*) High price in many places.
Electricity	(*a*) Every advantage.	(*a*) High price.

Fuels for Cooking.—The same fuels are used for cooking as for heating. In the cities artificial gas is becoming almost universal for all cooking purposes. Electricity is desirable as a cooking fuel where its price permits. Both are discussed in following chapters.

The kitchen range which burns coal or wood is the common method of cooking of course where gas is not available, and its economical management requires the same care as does a furnace. The "Blue Flame" kerosene oil range is economical and efficient for summer or even for continuous use.

In Conclusion.—A real saving may be made in the careful use of both fuel and light. Children and maids should be taught to watch both.

There is a minimum consumption of fuel necessary for the operation of any fire. To lower that minimum is poor economy. It takes just so much fuel to give a certain amount of heat, and if the house is to be warm, fuel must be burned. How to get all the available heat out of that particular fuel in that particular heater is a problem in economy that should be studied in every detail.

QUESTIONS

1. Name the different methods of heating a house or apartment.
2. Which system is the most expensive to install?
3. Which is the most satisfactory in operation? Why?
4. What is the principle of furnace heat? Of hot-water heating? Of steam heating?
5. Why should radiators and registers bear a definite relation to the size of a room?
6. What has ventilation to do with heating? With humidity?
7. How may one humidify a room?
8. What is the advantage of an open fire-place?
9. What is anthracite? Lignite? Cannel?
10. What are the different sizes of hard coal?
11. What is coke?
12. What fuels give the greatest heat? The quickest heat?
13. What is the basis upon which the cost of gas is fixed?

PROBLEMS AND DEMONSTRATIONS

1. In your vicinity, how much a ton is hard coal. Soft coal?
2. Are they sold by "long ton" or by "short ton" What is the difference?
3. How is hard wood sold? Soft wood?
4. How much per month does your family pay for gas?
5. How much per year for fuel?
6. How much a month does this average for the entire year?
7. How is gas charged for in your community?
8. A wagon carrying a ton of coal weighs 1850 pounds. How much should both weigh?
9. A driver has a load that shows a gross weight of 4020 pounds and his wagon weighs 1850 pounds; how much coal should he take off in order to deliver to the customer an exact ton of coal?
10. If hard coal costs $10.80 per ton, how much will 1500 pounds cost?
11. If 1500 pounds of coal cost $8.00, what will one ton cost?

12. A man purchased a pile of wood 16 feet long, 8 feet wide and 8 feet high for $8.40. How many cords did he receive and how much per cord did he pay for the wood?
13. Mr. Jones claimed to have sold Mr. Smith a loose pile of wood containing a cord of wood, but Mr. Smith claimed that the wood did not amount to a cord. How could each party prove his contention?
14. How many cubic feet of air in a room 12 ft. x 16 ft. x 8 ft. high?
15. If it is estimated that there should be 1 sq. ft. of radiating surface in a room to every 40 cu. ft. of air, how many square feet of radiating surface should there be in the radiators of the room mentioned in the preceding problem?
16. If on account of windows and northern exposure, it is estimated that such a room needs 1 sq. ft. of radiating surface to every 20 cu. ft. of air, how much radiator surface should there be?
17. A bin containing a load of nut coal, which when levelled measured 4 ft. wide, 5 ft. long, and 3 ft. deep. By measure, how much coal did the bin contain?
18. Another bin contained a load of cannel coal which when levelled measured 5 ft. wide, 6 ft. long and 4 ft. deep. How many tons did the coal amount to?
19. Do you know of any other fuels in use than those mentioned in this chapter?

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CHAPTER XIII

GAS LIGHT AND HEAT

ARTIFICIAL coal gas is chiefly used for cooking and lighting purposes. As a heating fuel its use is supplementary in gas radiators, gas-logs or small stoves. Most of the modern apartments are piped with cooking connections only. In some houses gas-heated irons or machine ironers are in use, but gas as a motive force is seldom found, though entirely practicable.

Other Illuminants.—Except in rural communities and on farms, gas and electricity are now the principal illuminating agents in the American home. Even here, private gas plants are found and electricity should be more common through the use of neglected water-power possibilities. Electricity is discussed in the next chapter. The old kerosene burners have been improved upon, and it is now possible to secure kerosene lamps that are not only artistic in appearance but which give as brilliant a light as that derived from commercial gas. Even the incandescent mantle is used with kerosene. When the universal rule for safe and agreeable lighting is carried out, namely, "Do not look at the naked flame," and proper shades or globes are present, the light from a kerosene lamp is very satisfactory. To care for the lamps is a burden.

Acetylene gas, derived from the action of water on calcium carbide, is available for homes and stores not supplied with either gas or electricity. The cost of maintenance is small, the light brilliant and very satisfactory. The cost of installation is somewhat high, but on the other hand small in comparison with the results obtained. There is danger in the careless handling of such a plant, but improved apparatus has reduced it to a minimum. The apparatus approved by the Underwriters' Laboratories (Inc.) of Chicago may be trusted.[1]

Early Lighting Mediums.—In order to properly appreciate present-day methods of illumination one should know a little about the methods of lighting used before the perfection of manufactured

[1]A set of complete rules for acetylene installation has been published by the National Fire Protection Association, 87 Milk Street, Boston.

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124100

gas. During the early days of gas experimentation, which began in 1784, the use of manufactured gas was too expensive for the average householder. A bill for 1100 cubic feet of gas in New York in 1827 shows the cost to the householder at $11, while a similar bill for the same amount of gas rendered in the same city for 1918 shows the cost to be 88 cents.

From 1815 to 1855 candles and sperm oil were practically the only illuminants in common use by the average family. During this period, whale oil cost about 80 cents per gallon, although from 1845 to 1855 the price averaged $1.77 per gallon. Tallow candles sold at about 15 cents per pound, a pound averaging six candles, or 2½ cents each. Each candle represented seven burning hours at a cost of one-third of a cent per hour. During this period of forty years it has been estimated that the average family used the equivalent of 20 candle-hours lighting per night, at an approximate cost of $24 a year.

The high price of sperm oil during the decade of 1845–1855 led to a search for other mediums of lighting, and between 1855 and 1865 the kerosene lamp was introduced, which increased the illumination of the home 50 per cent. without much change in cost. 1865 to 1875 was the last decade of the tallow candle and the first decade in which gas became an important factor in the life of the people. Gas at this period sold for $2.50 per thousand cubic feet, and the lighting of the average home increased to about 100 candle-hours per night, or five times as much as that of the previous half century.

The year 1895 witnessed the reduction in the cost of kerosene to 13½ cents per gallon, and the cost of gas to $1.50 a thousand cubic feet. In 1885 the invention of the Welsbach lamp had increased the efficiency of gas from 3 to 20 candles per cubic foot, and the kerosene lamp with its circular wick now produced 38 candle-power. The cost of illumination for this decade, 1885–1895, was $25 per family per year.

Following 1895 kerosene rapidly gave place in cities and towns *to gas* and electricity as a lighting medium and up to 1905 the average family cost per year was $20. To-day the maximum gas *light* of the average home is about 360 candle-hours per night, or

burner, but comes entirely from the mantle being made "white hot" by the burning gas. Therefore, it must be clear that "candle-power" means absolutely nothing as to the light-giving quality of gas when burned in an incandescent mantle.

The heat-producing quality of gas, measurable in "heat units," becomes the only quality that counts under modern conditions; for heat, and heat only, produces light in the mantle lamp; and heat is all that anybody wants from gas in the stove, water-heater, flat-iron, shop and for whatever else gas is used, except the very small quantity still consumed in the antiquated flat flame burners.

To meet these new conditions, "heat unit" gas is now standard in practically all of Europe; in Canada, Argentine and Japan; in Massachusetts, Connecticut, New Hampshire, New Jersey, Pennsylvania, Maryland, District of Columbia (City of Washington), Arizona, Nevada, Missouri, Montana, Washington, Oregon, Ohio, Indiana, Wisconsin and Illinois.

The enriched candle-power gas is necessarily somewhat higher in heat units per cubic foot than thinner heat unit gas and a claim has been made that reducing the heat units will necessitate more gas to accomplish a given result, hence higher cost to the consumer. This would seem to be true theoretically, but practical tests up to this time are said not to sustain the claim. In a Bunsen burner (any fuel burner) a gas carrying an excess of rich hydrocarbons, like 22 candle-power gas, will not yield the results, in proportion to heat units carried, obtainable from a gas that does not contain this excess of rich hydrocarbons. Therefore, for most uses, little, if any more, of a 565 heat unit gas will be used to produce given results than with the present gas. Exhaustive experiments, now being made by the U. S. Bureau of Standards, should result in exact information on this point.[1]

Gas Lighting and Health.—The result of tests made by Dr. Samuel Rideal, of Royal Westminster Institute, London, summarizes the relations of gas lighting to health as follows:

"1. That the pulse-rate, frequency of respiration, blood-pressure, number of blood corpuscles, body temperature, bodily weight, and mental fatigue over the entire three months' test showed no greater change with gas lighting than with electric lighting.

"2. That the percentage of carbonic acid gas and moisture in

[1]From information supplied by the People's Gas Light and Coke Co., Chicago, Ill.

the air varied no more with gas lighting than with electric lighti
of equal intensity, and that the rise in room temperature at t
breathing level was substantially the same in either gas or electricit
both with and without adequate facilities for ventilation. Th
gas-lighted room was somewhat cooler under the latter conditions.

"3. That ventilation was much more vigorous with gas lighting
than with electric lighting even with doors and windows closed
and was sufficient to remove the products of gas combustion, thus
accounting for the results in (2). This ventilating effect is pro-
duced by the uprising currents of air from the gas burners.

"4. That the organic matter from the lungs (which produces
'stuffiness' and depression), as well as bacterial matter, were pres-
ent to a much less degree in the gas-lighted room. This effect was
principally due to the burning of this matter in the flame of the
gas burner.

"5. That gas light is less fatiguing to the eye than is electric
lighting. This is because of the lower brilliancy of the gas mantle,
reducing 'glare' from polished surfaces, glazed papers, etc.

"These tests indicate that gas properly used is not only *no*
deleterious to health, but is distinctly beneficial, and that the hea
produced by gas lamps and heaters may be utilized to produce ver
effective ventilation. This is a most important consideration."

The Cost of Gas.—Gas-mantle lighting is generally cheape
than electricity, although the latter has many advantages in its u
over gas. Probably the average price for gas in the larger citi
of this country is 80 cents net per thousand cubic feet. G
appliances are not listed according to a definite cost per hour fo
operation as are most electric appliances, but the following tabul
tion from the Monthly Bulletin of the National Gas Association fo
December, 1916, shows what may be accomplished with one, an
with ten cents' worth of gas for cooking purposes:

What One Cent's Worth of Gas Will Do—Rate 80 Cents per 1000 Cubic Feet:

1. Will cook the cereal, boil the coffee and boil eggs for a family of eight.
2. Will toast fifty slices of bread.
3. Will bake enough biscuits for the breakfast of a family of eight.
4. Will heat an ordinary bedroom for an hour.
5. Will heat enough water for shaving for the average man for three weeks.
6. Will heat the baby's bottle for ten feedings.
7. Will heat milady's curling iron every day for a month.
8. Will bring three gallons of cold water to boiling.
9. Will furnish twelve gallons of hot water.

10. Will furnish three hours' continuous ironing.
11. Will cook enough soup for a family of eight.
12. Will fry chops for two meals for a family of eight.
13. Will heat and operate a large domestic oven for one-half hour.
14. After being heated, it will operate the oven for three-quarters of an hour.
15. Will singe twenty chickens.
16. Will fry four chickens.
17. Will fry enough waffles for eight people.
18. Will boil enough potatoes for a family of eight.
19. Will sterilize fourteen gallons of water for drinking purposes.
20. Will operate a Rutz (pilot light) lighter for three days—lighting the top burners as many times as would be necessary where a gas stove is used for preparing all the food of a family.
21. Will operate three large upright mantle lamps for one hour.
22. Will make six pounds of ice.
23. Will operate a 1 horse-power gas engine for forty minutes.
24. Will operate a 1 horse-power gas-fired steam boiler for thirteen and one-half minutes.

What Ten Cents' Worth of Gas Will Do—Rate $1.00 per 1000 Cubic Feet:

1. Cook a five-course dinner for six persons, as follows:
   (a) Cream of asparagus soup, toasted bread sticks;
   (b) creamed fish, mashed potatoes, sandwiches;
   (c) prime roast of beef (5 pounds), lima beans, scalloped tomatoes, cauliflower with white sauce, baked yams, corn muffins;
   (d) grape fruit salad, French dressing, crackers;
   (e) fancy charlotte.
2. Bake thirty biscuits and broil a three-pound steak for two cents, or five times that quantity for ten cents.
3. Bake one four-layer cake with chocolate filling for two cents, or five four-layer cakes for ten cents.
4. Bake five large angel cakes at different times.
5. Fry one hundred waffles.
6. Heat water for eight hot baths in summer, five in winter.
7. Cook three meals for six persons.
8. Run a gas iron 20 hours.

How the Gas Meter Registers.—The row of circles (Fig. 17) registers the total amount of gas consumed. At the top of each circle the amount of gas registered for one complete revolution of the pointer on that circle is shown. The pointer on each circle starts at zero (0) and revolves around the circle in the sequence of the figures, and when zero is reached again, the revolution has been completed. Each figure on the "1 thousand" circle denotes 100 cubic feet, and the complete circuit represents 1000; similarly each figure on the "10 thousand," represents 1000 feet; each on the "100 thousand," 10,000 feet; and each on the "1 million" circle represents 100,000 cubic feet.

As each pointer on a circle makes a complete revolution of its ten units, there is registered one unit on the next higher circle. Thus, while the pointer on the "1 thousand" circle is making its

first revolution around that circle the pointer on the "10 thousand" circle is gradually moving toward figure 1 and will register 1 or 1000 cubic feet when the pointer on the "1 thousand" circle reaches zero again. It then moves to the successive figures around the circle at the completion of each revolution on the first circle. When the pointer on the "10 thousand" circle reaches zero, thus completing its first revolution, it will be found that the pointer on the "100 thousand" circle is resting on figure 1, registering 10,000 cubic feet, and will continue around the circle in the way just explained. This system of registration is continued until the pointer on the circle of the highest denomination has made a com-

FIG. 17.—Gas meter index reads, 79500 cu. ft.

plete revolution; then all the pointers will rest on zero and as the use of gas is continued this same process of registration will be repeated.

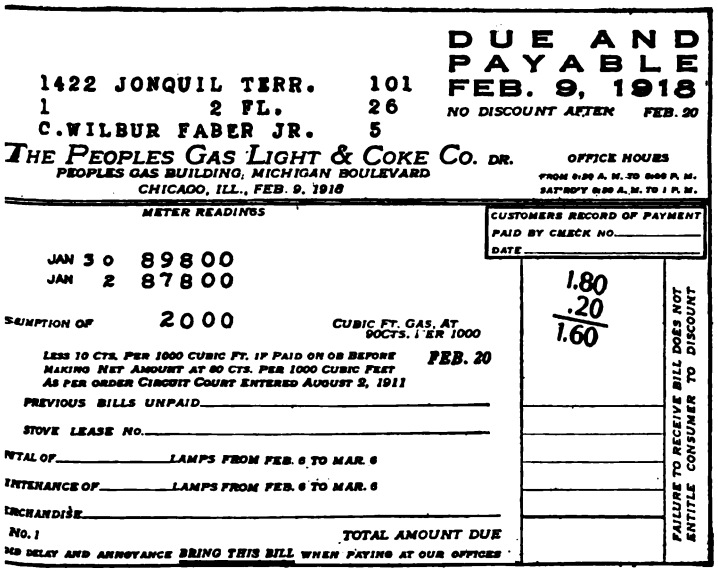
Some meters show small dials, one registering one-half cubic foot, and another registering two cubic feet, which are especially useful in detecting leaks and in testing the consumption of various pieces of gas-using equipment.

Reading the Meter.—In reading the meter index, always read the left-hand circle first, then the other dials in succession to the right, and add two zeros (00) to the last figure for the hundreds shown on the last circle. One hundred cubic feet is the smallest amount read in a statement from the gas meter index. *When any point between two figures is indicated always read the lowest or last figure the pointer has passed,* until the next figure is actually reached or passed. Thus, in Fig. 17 the pointer rests between figures 7 and 8, figure 7 being the lowest or the last figure passed by the pointer, is the correct figure to read. The next figure is 9, because figure 0 has not been reached yet and cannot be registered until the pointer on the "1 thousand" dial gets to zero, and the last figure is 5. The entire reading is 79,500 cubic feet.

› prove your reading at any time, see whether the revolutions :ed to register the figures that you read have been completed on :her circles.

o ascertain the quantity of gas consumed during the period ng between the two readings, subtract the earlier from the later ng, and the difference will be the quantity of gas consumed. ı this one can readily calculate the amount of his bill.

very gas consumer should learn how to read the index of a ıeter and read his own meter regularly, at frequent intervals,


1422 JONQUIL TERR. 101
1 2 FL. 26
C. WILBUR FABER JR. 5

DUE AND PAYABLE FEB. 9, 1918
NO DISCOUNT AFTER FEB. 20

THE PEOPLES GAS LIGHT & COKE CO. DR.
PEOPLES GAS BUILDING, MICHIGAN BOULEVARD
CHICAGO, ILL., FEB. 9, 1918

OFFICE HOURS
FROM 8:00 A. M. TO 5:00 P. M.
SATURDAY 8:00 A. M. TO 1 P. M.

METER READINGS

JAN 30 89800
JAN 2 87800

SUMPTION OF 2000 CUBIC FT. GAS, AT 90CTS. PER 1000

LESS 10 CTS. PER 1000 CUBIC FT. IF PAID ON OR BEFORE FEB. 20
MAKING NET AMOUNT AT 80 CTS. PER 1000 CUBIC FEET
AS PER ORDER CIRCUIT COURT ENTERED AUGUST 2, 1911

CUSTOMERS RECORD OF PAYMENT
PAID BY CHECK NO.
DATE

1.80
.20
1.60

PREVIOUS BILLS UNPAID
STOVE LEASE NO.
RENTAL OF LAMPS FROM FEB. 6 TO MAR. 6
MAINTENANCE OF LAMPS FROM FEB. 6 TO MAR. 6
MERCHANDISE
No. 1 TOTAL AMOUNT DUE
TO DELAY AND ANNOYANCE BRING THIS BILL WHEN PAYING AT OUR OFFICES

FAILURE TO RECEIVE BILL DOES NOT ENTITLE CONSUMER TO DISCOUNT

FIG. 18.—A gas bill showing cash discount

eep tab on the quantity of gas used. Consumers who make a ılar practice of reading their meters will have a constant check heir gas consumption, thus preventing waste and correspondingly :ease the gas bills. The correctness of the monthly bills ren- :d to them by the gas company can also be easily verified.

If a gas consumer has any reason to doubt the accuracy of his meter, a request for an investigation or a test of his meter from h consumer to the proper city department will receive prompt :ntion.

Gas Bills.—A copy of a receipted bill (Fig. 18) shows 2000 cubic feet of gas was used during the month which ca $1.80, and the discount for prompt payment amounting to 20 leaves the bill at $1.60.

A Customer's Record of Gas Consumption.—The foll form has been suggested for the use of householders and fa who desire to read their meters and record the amount o consumed. It can be placed in any blank book:

Record

191				191			
Date of reading	Index statement	Consumed cu. ft.	Amount of bill	Date of reading	Index statement	Consumed cu. ft.	A c
	00	00	$		00	00	$
	00	00			00	00	
	00	00			00	00	
	00	00			00	00	
	00	00			00	00	
	00	00			00	00	
	00	00			00	00	
	00	00			00	00	
	00	00			00	00	
Total . . .	00	00		Total . . .	00	00	
Average	00	00		Average .	00	00	

Leaks.—The fact that one part of gas in sixty thousand of air can be detected by the sense of smell, shows how re the presence of a gas leak can be detected. A leak from the pipe of the meter or the piping, fixtures and appliances used thr out the premises will be registered on the meter and must be pai

Never hunt for gas leaks with a lighted match or open of any kind; locate any leak by the sense of smell or apply a solution of soap suds with a brush or sponge to the parts

pipes or fixtures, etc., where a leak might occur and, if gas is escaping, the soap suds will form bubbles like those the children blow through a clay pipe.

Never use matches or take an unprotected flame into a room, cellar, building or any other place where the odor of gas is noticeable, or there is the least possibility of gas being present, until you have opened the windows or otherwise thoroughly ventilated the premises and shut off the meter. To disregard these precautions may result in loss of life or serious damage to the premises from an explosion or fire. A small proportion of gas mixed with air forms a highly explosive mixture.

When the odor of gas is noticed see whether any burners have been accidentally left open; if none have been, try, cautiously, to locate the leak and make repairs. If these measures do not locate the trouble, notify the gas company *immediately.*

The flow of gas through a leak may be temporarily stopped with any kind of soap well plugged in and around the place where gas is escaping or by the use of a soap bandage tightly secured.

It is suggested that an occasional test be made on the piping and fixtures, etc., in a building to determine whether there is any possible leakage of gas that has escaped the notice of the occupants of the premises, due to its location in some part of the building where currents of air might carry the gas out of doors. This test should be made by shutting off all the burners throughout the premises and marking the position of the pointer on either of the upper small circles on the index of the meter. If the pointer stands still for a period of about fifteen minutes, it may be concluded that there is no leak of any consequence; but if the pointer moves forward, and you are sure that all the burners are closed, there must be a leak, the amount of which may be determined by timing one, or a part of one, revolution of the pointer around the circle.

Prepayment Meters.—It is very important that gas consumers who have a prepayment ("quarter in the slot") meter on the premises should always heed the warning: It is better never to allow the gas to run entirely out of the meter. But if this does happen or the lights become very dim be sure to close all gas burners supplied through your meter before placing another quarter in the meter, as gas will escape from any open burner as soon as the money is inserted.

Gas Lights—Open Flame Versus Mantles.—The mantle gas

burner has, now, very largely superseded the open flat flame type of gas burner for use in the general illumination of dwellings, stores, factories.

The U. S. Bureau of Standards has definitely proved that:

1. The Flat Flame Burner uses up about five times as much gas as the mantle burner to produce the same amount of light.

2. Flat Flame Lighting costs about four times as much as mantle lighting, including cost of mantles.

3. Gas Light, when produced by the mantle burner, is the cheapest light in the world.

Inexpensive but durable mantle lights can be had to take the place of practically *all* flat flame burners *at a saving*. Every 60 cents paid for flat flame lighting will pay for one of these lights complete (both burner and mantle) and for enough gas to produce nearly *three times* the illumination delivered by the flat flame.

If the open flame burners are in use on the premises, do not allow the gas from them to burn with a blowing noise and a ragged flame, as a considerable quantity of gas can be wasted in this way. Regulate the flow of gas through the burner with the burner key so that it burns with a steady even flame, or use a burner that is self regulating.

It is quite necessary that all gas burner passages and orifices be kept clean and in perfect condition to obtain the best results from the gas consumed.

Management of Gas Burners.—Air mixes with the gas going into a mantle burner and this mixture burns with a blue or non-luminous flame at the tip of the burner inside of the mantle, the heat produced raising the mantle to incandescence or luminosity, thus it is the mantle that gives the light. Similar blue flame burners or Bunsen burners which mix air and gas before burning are found on stoves, hot water heaters, etc.

For the satisfactory operation of any kind of a blue flame gas burner it is essential that the proper quantity of air and gas mixture be delivered to the burner and that the air and gas be in proper proportion and maintained so by the air or gas regulator usually provided for this purpose.

The delivery of an insufficient quantity of air and gas mixture to a burner may be due to a lower gas pressure than is sufficient to overcome the resistance of the burner passages, or the passages may be obstructed by accumulations of dust or dirt. In this latter case

cleaning is the obvious remedy. Gas burner passages containing a wire gauze or similar equipment should be blown out often enough to keep them free from obstructing deposits of dirt. Stoppages in piping or burner, or too small house piping, wrong adjustment of the gas cock at the meter or burner, improper regulation of air mixer, and improperly constructed mantle burners, are frequent causes for insufficient gas pressure.

Economy in gas consumption is promoted by not burning gas flames on gas stoves long at their greatest height. In cooking foods in water, after the water has come to boiling, it will continue at the proper temperature to cook the food, if a low flame is maintained. A simmering burner is an economy. An oil stove oven placed over a top burner of the gas range uses less gas than the regular gas oven; a piece of sheet-iron under the flat-irons and a tin or sheet-iron cover over them; the triple saucepan that fits over one burner—each conserves heat and so lessens the gas used. The iron stove top for gas ranges promotes economy. Watch lights also, and do not leave them turned on.

All Homes and Apartments Should be Equipped for Gas.—There is a tendency on the part of builders and contractors not to pipe modern houses and apartments for gas except for cooking purposes. The popularity of electricity as a lighting medium has discounted the use of gas for this purpose in the minds of the general public, but whether either medium is to be depended upon as the principal source of supply, the builder should see to it that every room is equipped both with gas and electricity.

Sudden storms, damage to feed wires or interference at power plants and possible strikes cause a suspension of electric service that may prove inconvenient or become the source of considerable hardship. If the house or apartment is equipped with gas lighting, this may be used in such emergencies.

Gas Apparatus.—The various devices and appliances on the market for the convenience of the home, and which depend upon the consumption of gas for operation, are well known, so that a list of the more important of these appliances is all that is necessary in connection with this chapter.

Hot-water heater,
Instantaneous hot-water heaters,
Automatic hot-water heaters,
Gas ranges,
Gas plates for cooking,
Incinerators,
Toasters.
Chafing dishes,

Waffle irons,
Percolators,
Samovars,
Irons,
Water sterilizers,
Vacuum cleaners,
Gas logs,
Portable gas heaters,
Gas grates,
Gas-heated mangles,
Gas-heated clothes dryers,
Refrigeration by gas.

Gas for Household Power.—Internal combustion engines or gas engines can be had for use with manufactured gas or natural gas. If a small engine is to be installed for domestic power, one should investigate the use of these fuels if available.

QUESTIONS

1. What is meant by candle-power?
2. What is meant by a British Thermal Unit?
3. How is acetylene made? Is there such a lighting system in your vicinity?
4. What is the cost of kerosene and of gas in your community?
5. How is illuminating gas measured?
6. If you smell gas in a room, what should you not do?
7. How may a small leak be temporarily stopped?
8. What advantage follows the prompt payment of gas bills?
9. If the mantle flame grows dim, what is a probable cause and how would you remedy it?
10. What is a prepayment meter and what cautions should be observed in its use?

PROBLEMS

1. Read your gas meter at intervals of one month and calculate the cost of gas for each interval.
2. Watch yourself and others to see how you may lessen the cost of gas or other illuminant in your home.
3. The index on the right-hand dial of a gas meter is between 2 and 3; the middle index is between 3 and 4; the left-hand index is between 8 and 9. What is the meter reading?
4. Supply the last reading and make out the bill at 80 cents per M.
5. If you use kerosene, calculate the capacity of your lamps; how many hours do they burn on an average during Nov., Dec., Jan. and Feb.?
6. What does it cost to light your house with kerosene? Reckon the labor for caring for the lamps at the price that you would have to pay per hour.

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CHAPTER XIV

ELECTRIC LIGHT AND POWER

ELECTRICITY is the great modern servant of all work. Through its means we may take the heat of coal or the energy of the waterfall and apply it to such every-day tasks as lighting the living room, browning the breakfast toast, or sweeping the rugs. We can thus make coal or water power do our work without any of the fuss of tending to the fires or running the water wheel, without any of the heat, smoke or jarring noises of machinery in our establishments. It is only necessary to have a system of wires in our home connected to the lines of the central station company running in the street, to supply the proper device, such as an incandescent lamp, a toaster or a vacuum cleaner, and then let the electricity do the work.

Much has been made of the mystery of electricity, but there is little mystery in its three major household applications: lighting, heat and mechanical power. These are all simply forms of work, and it is for the work done that the central station company charges. To turn the motor of the vacuum cleaner for one hour requires a definite amount of work. The energy to do this work is stored in coal and when the coal is burned the energy is made available for sweeping, through the medium of electric current. That is, instead of turning the coal energy into steam at home and using the steam in a little engine to run the fan of the cleaner, the heat of the coal is used at the central power station. Here it is applied to run machines which pump electric current and this current in turn, flowing through the electric wires in the home, makes the electric motor on the vacuum cleaner revolve. The fan is whirled rapidly and the energy of the coal is used in cleaning the rug.

Rates of Charging for Electricity.—To make a fair charge for electrical service then, it is only necessary to measure the amount of work done. The company measures at the house meter the total amount of electrical work done on the premises and charges for this. For any measurement some unit quantity must

be adopted as a standard, and for electrical work the unit has b
named the watt hour. This unit quantity happens to be v
small and it is more convenient to express results in terms of 1C
times the unit amount, or 1000 watt hours. Using the metric syst
prefix for 1000, 1000 watt hours is called a kilowatt hour.
kilowatt hour of work is equal to that done by one horse-power
1 1/3 hours. The vacuum cleaner motor does this amount of wc
in about five hours, while the electric flatiron does it in two.
other words, the flatiron requires coal to be burned two and one-h
times as fast as the vacuum cleaner, or in one hour it will use
the energy of two and one-half times as much coal as the clean

The most convenient way of giving the size of electrical lam
heaters and motors, as suggested by the foregoing, is to state h
fast they convert electrical energy into work. To find this spe
of working we simply divide the amount of work the device h
done by the time it has taken to do it, or the watt hours by t
hours, and get the speed of performance in watts. The prima
unit of rate of work is thus one watt or, again for convenience
stating the result, we may take 1000 times this, the kilowatt.
you know the size of any device in watts, you know just how f
it will consume electrical energy. Thus, a 50-watt lamp tu
50-watt hours of electrical energy into heat and light every hc
and hence, in 20 hours will use $50 \times 20 = 1000$ watts $= 1$ kilow
hour (KWH) of electrical energy. As said above, a 500-w
electrical iron in two hours converts $500 \times 2 = 1000$ watts $= 1$ KW
of electrical energy into heating work.

To measure the consumption of electrical energy the cent
station company installs a watt hour meter at the point where t
wires enter the building. This meter is in reality a tiny mot
so arranged that the revolutions of the rotating part are exac
proportional to the amount of energy which passes into the buildi
through the meter at the point where it is connected. The revo
tions of the shaft are counted up by a series of dials (in fo
precisely like the gas meter, p. 156).

Reading Electricity Meters.—The electric meter is read as
the gas meter, on the dials from left to right, the right-hand d
indicating units, the next to the left tens, and so on in decin
ratio—the unit being the watt hour.

For uniformity, the dial values of all meters of the same ty
are usually the same, without regard to the capacity of the met

so that a multiplying factor, called a register constant, is necessary for meters of large capacity. This register constant is definitely established by the manufacturer of the watt hour meter and is plainly indicated on the dial face as "Multiply by" (whatever the constant may be).

To determine the amount of electricity registered during a given time subtract the reading of the meter at the beginning of the period from the reading at the end of the period. If there is no register constant marked, the difference of the two readings is the amount of the consumption in the unit marked on the dial face. When a register constant is marked at the bottom of the dial face multiply the difference of the readings by this constant to obtain the consumption.

"Maximum Demand Charge."—Some companies are basing their electric bills partly on the maximum amount demanded by a customer at any time during the month, and there is a certain justice in such a charge. If electricity were a commodity which could be stored in tanks like gas, or delivered in bags like coal, it would merely be necessary to charge for the amount which the customer bought, but one of the special characteristics of electrical energy is that it must be made at the instant used. Now, the demands vary greatly during the day and night, as transportation, office and home use varies. The company, however, must have machines in its stations large enough to pump all the current which can possibly be required for the maximum use, which comes in the evening, of course. They must have, too, underground cables and overhead wires large enough to carry this current easily, and meters in the customers' homes of sufficient size to pass the greatest amount of current the customer will ever require without damage to the delicate mechanism.

In every detail, therefore, the amount of money which must be invested in equipment is determined not by the average amount of electricity used, but by the maximum. To supply any given customer the company has to provide a system sufficiently large to meet his greatest demand, and in consequence it is a just basis of selling the service to charge in part for the use of the equipment needed for this customer's maximum demand, as well as in part for the energy actually consumed by him.

To measure this maximum demand element of the bill an additional meter, known as a maximum demand indicator, is used.

This registers the highest rate of consumption of electrical ene or, in other words, the highest speed of working of the electric passing through it since its last adjustment. These indicators set back to zero once a month, and consequently the indicati recorded are the maximum demand during the month. For ample, if the maximum demand indicator shows 4½ kilowatts, particular customer's installation in question has required t 4½ kilowatts of generating and transmitting capacity be availa at some time during the past month. To bring this to a d basis it is assumed that the customer may require this installat for one hour every day and he is charged, therefore, for thirty ho use of this amount of equipment during the month. For sn customers the additional investment in a maximum demand mete not warranted and, instead, the probable requirement of the electri appliances connected in their premises, based upon average in households, is used as their maximum demand; for example home having equipment connected to average a total of 900 w if all equipment is being used is found to have an average maxim demand of 500 watts, or ½ kilowatt. One-half kilowatt for hour per day per month would consume 15 KWH; hence, for customers having about 900 watts of equipment the monthly m mum demand charge is made for 15 KWH. For larger custom there is more variation in the individual uses of electricity, howe and the maximum demand meters are then installed.

Typical Electricity Rates.—These two elements, the cent station equipment required and the amount of energy consum are therefore often combined in electric rates. Thus, Commonwealth Edison Company of Chicago at present charges its service as follows:

Ten (10) cents per kilowatt hour for electricity used equival to, or less than, the first 30 hours' use per month of the maxim demand in the month.

Six (6) cents per kilowatt hour for additional electricity u equivalent to, or less than, the next 30 hours' use per month the maximum demand in the month.

Three (3) cents per kilowatt hour for all electricity used month in excess of the equivalent of 60 hours' use of the maxim demand.

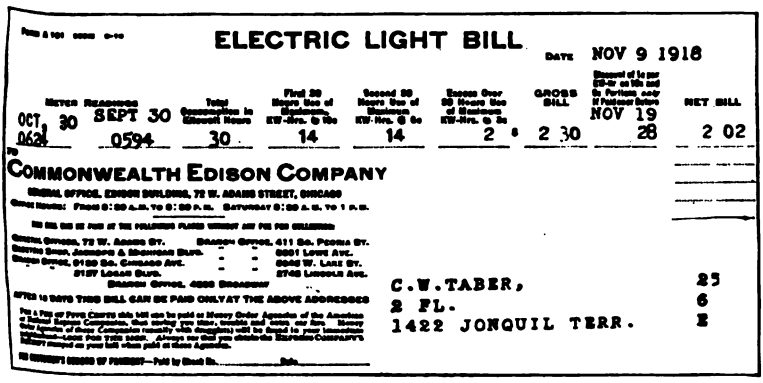
A discount for prompt payment is allowed of one (1) cent kilowatt hour on that portion of the bill computed at the 10-

and 6-cent rates when the bill is paid on or before ten days after its date.

Fig. 19 is an example of a bill rendered for electrical service. Note that the total monthly consumption was 30 kilowatt hours. This equalled the following:

First 30 hours use of maximum equal to 14 KWH @ 10c	$1.40
Second 30 hours use of maximum equal to 14 KWH @ 6c	.84
Excess over 60 hours use of maximum equal to 2 KWH @ 3c	.06
Gross amount of bill	$2.30
Discount 1c per KWH on 10c portion	14c
Discount 1c per KWH on 10c portion	14c
Discount total	28c .28
Net bill	$2.02

All central station companies are glad to explain their rates and to show just how any given bill has been figured. Electricity meters



ELECTRIC LIGHT BILL

DATE NOV 9 1918

METER READINGS		Total Consumption in Kilowatt Hours	First 30 Hours Use of Maximum, KW-Hrs. @ 10c	Second 30 Hours Use of Maximum, KW-Hrs. @ 6c	Excess Over 60 Hours Use of Maximum KW-Hrs. @ 3c	GROSS BILL	Discount if by mail 28c on 10c and 6c Portions, only if Postmark Before	NET BILL
OCT. 30	SEPT 30	30	14	14	2	2 30	NOV 19 28	2 02
0628	0594							

TO

COMMONWEALTH EDISON COMPANY

ORIGINAL OFFICE, EDISON BUILDING, 72 W. ADAMS STREET, CHICAGO

C. W. TABER,
2 FL.
1422 JONQUIL TERR.

25
6
2

FIG. 19.—A bill rendered for electrical service

are probably the most accurate measuring devices in common use, and the reading of these meters and the figuring of the bill is, after all, a simple matter.

Safety With Electricity.—In using electricity in the household, just as for other natural aids, some simple precautions should be borne in mind. Thus, everyone knows that leaking gas may lead to fatal results, but properly used it is one of the most convenient fuels yet developed for the cook stove. In the same way

we should avoid contact with wires or utensils which will per
the electric current to enter our bodies. As a matter of fact,
human skin, when it is very dry, resists electricity excellently;
moisture, even moderate perspiration, changes the character of
surface so that the current readily enters. Hence, in the bathr
or kitchen, where water is present in large quantities, ther
considerably increased possibility of electric shock through
hands or other parts of the body. Electrical appliances, elec
wiring and the fittings used for connections are manufactu
carefully with insulating material between the current-carry
conductors and all portions of the equipment with which the pe
may come in contact. If this insulating material remains dry
intact there is no possibility of shock. Occasionally, however, w
is splashed about or parts of the structure become worn so
electric current leaks to the outer surfaces of the apparatus. Th
possibilities should be borne in mind and shock avoided, just
we make it habitual to shut off the gas completely. The m
useful precautions are:

Avoid handling switches, cords or appliances with wet ha

Do not touch electrical equipment with one hand while
other hand or any portion of the body is in contact with m
or metallic surfaces.

Have flexible cords and apparatus in general repaired
competent electrical workmen if chafed insulation appears at
point.

If even slight shock is felt in manipulating any electrical
trivance have the equipment inspected and put in order at onc

Attention to these four points will insure complete pers
safety. Certain other points may well be borne in mind, howe
to secure the best service possible from electric apparatus. Th
are:

(1) Handle all equipment with reasonable care. Thus, in disconnec
cords from flat-irons or other utensils, pull the plug away quickly, bu
not jerk the cord so as to gradually loosen its connection to the plug. W
an incandescent lamp is taken out of a socket, in order to connect some o
equipment, remember that the wire in the lamp is often finer than a hu
hair; hence lay the bulb down gently and protect it from rough blows.

(2) Should utensils fail to work, turn on one of the electric lamps
this does not light, the electricity is off the circuit. The trouble ma
due to a blown "fuse," which can sometimes be remedied as in (3) b
or it may be on the main wires outside your home. In the latter cas
central station company must be notified immediately. If the lamp l

properly, however, there is something wrong with the utensil, and it should be disconnected immediately.

(3) At the point where the wires enter the building you will find a cabinet containing a "main switch" and several "fuses." These fuses are either in the form of hollow plugs, screwed in like an incandescent lamp, or long cylinders, looking something like cartridges. The first are called Edison plug fuses; the second cartridge fuses. Inside the plug or cartridge is a small length of metal which melts at comparatively low temperatures. The connections are so arranged that the current must flow through one of these fuses to reach any part of the house. If more current than is safe for the wiring flows through it, the fuse heats, quickly melts open and so stops the current. The fuses are put in the circuits for your protection, and must never be replaced by a piece of copper wire or any similar makeshift. Such a substitution removes all protection by permitting such large currents to flow in cases of trouble as may heat the wiring red hot and lead to disastrous results. If the central station company gives you an extra supply of fuses, you will be able to replace blown ones yourself. To do this, *open the main switch;* inspect all the fuses to see which is burnt; replace this with another of exactly the same size, as marked on the fuse; and again close the main switch. Then try the apparatus, or lamp, which you were using at the time the electricity ceased. If the fuse blows again, ask the central station company at once to send a trouble man to locate the difficulty.

This last group of suggestions merely tends to better service. All these may be disregarded if it is made a practice to call the central station company every time anything goes wrong, but the points are so simple that it is believed most people will prefer to remember and apply these measures themselves.

Wiring.—The Society for Electrical Development says:

"It is impossible to over-emphasize the importance of adequate wiring, both in size of conductors and number of outlets. Just as too small a pipe will prevent an adequate flow of water or steam, so wires of insufficient diameter interpose too much 'resistance' to the flow of electric current, causing reduced 'voltage' and unsatisfactory service in lighting and other devices.

"Allow for too many rather than for too few outlets, both for lighting purposes and for floor or baseboard 'plugs'; there is no maintenance expense after they are once located.

"Of switches and controlling devices the number is legion, adapted to every conceivable purpose and condition. Obviously, clothespress lights should be automatically operated by the opening and closing of the door, but provided with an auxiliary wall switch; cellar or basement stairs should have push switches conveniently located at the top; bathrooms and passageways may advantageously have dimming devices, etc. Pull, push, pendent and other switches are to be had in every variety of finish, and 'indicators' (tiny bulbs

like those used on telephone boards) should be used on heat
and cooking devices where the current may be carelessly left
after using."

ELECTRIC LIGHTING

Incandescent Lamps.—The ordinary Mazda lamp consists
a sealed glass bulb enclosing an extremely fine tungsten wire. T
bulb is exhausted to a perfect vacuum, the vacuum serving
protect the wire from combustion and also to prevent loss of he
just as in the popular vacuum bottles the temperature of t
contents is maintained. The electric current flowing through t
tiny wire heats it white hot and light is given out until the w
is destroyed by the enormously high temperature. When it
remembered that this does not occur until 1000 hours or more
burning, the perfection of these lamps can be appreciated. T
older and much less efficient carbon lamps should be discarded.

Mazda lamps are available in many sizes, those giving abo
45, 37, 30, 18, 10 and 6 candlepower being most suitable for ho
use. These consume electricity at the rate of 60, 50, 40, 25, 15 a
10 watts, respectively. As the size of the lamp diminishes t
diameter of the filament wire decreases; hence, the 10-watt la
is much more fragile than the 60-watt lamp and must be handl
with correspondingly greater care. For most household appli
tions the 40- to 60-watt lamp in the living room, dining roo
bedroom and other principal spaces, and a single 25-watt lamp
smaller rooms and closets give good results.

In using these lighting sources it must be borne in mind th
the filament is much too bright to be looked at. If eyesight
to be conserved, it is essential that a proper shade or reflector
placed on every lamp. For many fixtures even this does not fu
conceal the lamp bulb and in such locations a special lamp cove
or partially covered with a translucent opal lacquer should be us
Of course, this lacquer absorbs some of the light. Such absorpti
is generally not more than 10 per cent., however, and the 90 p
cent. of the generated light which gets through it is much m
effective for good lighting than the 100 per cent. from a clear lam

For general lighting standard lamps in the straight side, pe
shaped bulbs should be used, for these are made in so much lar
quantities than any other form that the quality of the lamp
considerably better. For certain decorative applications, howev
spherical bulb lamps are available, and smaller bulbs in cand

flame or other ornamental shapes may also be obtained. These last are known as candelabra and miniature base lamps, and although they are sometimes excellent for special effects, they should never be used as the main source of illumination.

These points may well be remembered in choosing fixtures for the home. Designs which expose the lamp bulbs, as in the so-called candelabra fixtures, should always be avoided. Electric imitation candles, like other imitations, are most questionable art, and, perhaps more important, exposed electric lamps mean ultimately impaired eyesight. The semi-direct fixtures, in which the lamps are concealed by glass bowls, directing the greater part of the light to the ceiling, are especially effective, while the indirect system of lighting units, in which the bowl is opaque and all the light that is used is first thrown to the ceiling, is favored by many.

The larger lamps, as, for example, the 60-watt size, are so efficient, give so much light for each watt hour of electric energy consumed, that it is possible to filter the generated light economically. A filter may be chosen to permit only those colors of light to pass which are desired to give special effects. In the living room a golden amber tone is often desired, and this may be obtained by surrounding the lamp with an amber shade or dipping the bulb in an amber lacquer. In the kitchen, where it is desired to see the true colors of meat and other food, a special lamp enclosed in a blue glass bulb gives artificial daylight. In this case the blue glass filter is scientifically combined to allow just those proportions of the generated light to pass which will mix together to produce white daylight. These special lamps cost a little more than the standard plain ones, but in many cases the result offsets the expense.

The Comparative Cost of Electric Lighting.—While electricity is more expensive than light from gas-mantles, it is cheaper than open-flame gas burners, kerosene lamps, or candles.

A test made by the Society for Electrical Development with six candles showed that only 2.68 candlepower hours could be obtained for one cent. On the other hand, it was estimated that a 20-watt lamp, based upon a rate of 9 cents per kilowatt hour, can be lighted for 50 hours at a cost of 9 cents. This is equal to an efficiency of 850 candlepower hours, or 35 times as much light as can be had from a candle for one cent.

With kerosene at 15 cents per gallon, a kerosene lamp will give

72 candlepower hours for one cent. With electricity at 9 cents a kilowatt hour, 72 candlepower hours for one cent is balanced against 94 for electricity, or 22 candlepower hours in favor of electricity.

An open gas flame, with gas at 85 cents per thousand feet, will give 51 candlepower hours for one cent, as against 94 candlepower hours for electricity with electricity at 9 cents KWH. With the best gas-mantles, however, one cent will purchase 201 candlepower hours.

ELECTRIC HEATING AND COOKING

Flat Irons.—The most popular of all domestic applications of electric heat is probably the flat iron. It provides the convenience of continuous and even temperature in the iron, together with the entire absence of wasted heat in the room. Irons may be obtained in a considerable variety of shapes and some slight range of weight and electrical consumption, but one weighing about six pounds and consuming 500 or 600 watts is best for the average household. For large households electrically heated machine-irons will often prove economical for flat work.

With all heating appliances, and especially in using irons, the most important habit to form is that of *always* turning off the current when not in actual use. Standing idle with current flowing, the temperature rises far above working limits and, although the apparatus may not be injured, the fire hazard becomes considerable. Moreover, the electric meter faithfully registers the wasted energy and the bill reflects the user's carelessness.

Electric Cooking.—Next to the iron in convenience come the wide range of utensils for electrical cooking. The recent tendency has been to do more and more home cooking electrically. Beginning with single devices for warming a little milk, or preparing coffee, the equipment has been enlarged until complete electric ranges are now in use in many households.

In all cooking the question of fuel cost is fundamental. Comparatively large quantities of electricity must be consumed in baking and similar operations and it is only where especially low rates are offered for electricity used in cooking that electric ranges can be operated at expense comparable with those consuming other fuels. Where the maximum demand system of charging (p. 16[illegible] is in effect it is customary to omit the ranges and other heating and cooking devices in computing the electric load. Hence,

the work done by these utensils is paid for at the lowest rate. In many other communities a separate meter and system of wiring is installed for the range and an especially low rate offered. This practice is developing rapidly and local conditions should always be investigated, for the advantages of the electric stove are many. The advantages claimed for the electric range are:

1st. Lessens kitchen heat.
2nd. A cool kitchen lessens melting of ice in the refrigerator.
3rd. Regulation of heat is perfect.
4th. Cooking process may be delayed at will, which means hot meals under all conditions.
5th. No dirt, little work
6th. No matches; no flame. No danger from explosion and lessened fire hazards.
7th. No gases.
8th. Oven retains temperature long after heat is turned off, on the principle of the fireless cooker.
9th. Reduces shrinkage of food sometimes as much as 10 per cent., as every ounce of juice remains in the food.
10th. Saves time, as it needs no watching.

All these advantages are not yet fully realized, but it is believed that the electric range embodies them far better than any other range. On this topic Professor Percy Wilcox Gumaer, of the Experiment Station of the University of Wisconsin, says:

"The present status of the science of cookery is due, in a large degree, to the lack of adequate means of controlling the temperature of the food. When using the ordinary wood or coal cooking range the degree of heat is controlled chiefly by dealing with the food itself rather than by regulating the heat at the point of combustion. The amount of draft necessary to promote the combustion of the fuel causes too great a degree of heat in the oven or on the stove to enable the cook to deal with the food in the proper way, except by constantly watching it, stirring it and changing the position of the vessel on the stove or in the oven.

"With the advent of electric ovens a revolution in the methods of cooking has become possible: Automatic electric ovens will probably be developed in which the temperature will be accurately controlled and the necessity of constant vigilance will be removed. Some kinds of food will even be prepared in advance, placed in the oven and without any further attention on the part of the housewife, the current will be automatically turned on at a predetermined time. The temperature of the oven will increase to the desired value, and there remain constant until the food is properly cooked.

"With this method perfected the advantages of electric cooking over the other methods will be great, and in many cases the cost will not be excessive. To the possibility of obtaining uniformly well cooked food should be added the saving to the housewife in time and worry and the absence from the kitchen of excessive heat. The engineer's problem is, then, to design practical cooking devices in which the temperature can be accurately regulated with a minimum of attention on the part of the housewife."

Regarding cost, the Society of Electrical Development says:

"The cost of cooking will, of course, vary with each family a be at a minimum when the cooking is done by one accustom to the use of the electric range. The bills for the first month's u are usually the highest, because of a tendency on the part of t user to experiment with the various devices. Figures obtain from many customers show that the average family of four or fi persons will consume from 100 to 125 kilowatt hours of electi energy. With the cost of electric current ranging from two five cents per kilowatt hour, the monthly cooking bills vary fr $2 to $6.25."

Miscellaneous Cooking and Heating Utensils.—In comp ing the consumption of cooking and heating appliances, it is son times convenient to supplement the size as rated in watts by t "unit service." This last term has been adopted for the numb of hours a device may be operated continuously with one kilow hour of energy. In the following table is shown the range of si for different utensils in watts and also the unit service for ea utensil, or the number of hours it must be operated to consu 1 KWH of energy or do 1 KWH of work. The relation of t two columns is obvious. Thus, a brazier, consuming energy at t rate of 125 watts, uses 125-watt hours in 1 hour or 1 KWH $\frac{1000}{125}$=8 hours; and a larger brazier, consuming at the rate 500 watts, uses 500-watt hours in 1 hour or 1 KWH in $\frac{1000}{500}$ 2 hours.

ELECTRIC POWER

Under the heading "Electric Power" may be grouped all devi operated by means of an electric motor. Among the most use are electric fans, vacuum cleaners, washing machines, sewi machine motors, ice cream freezers, meat choppers and grind and small emery and buffing wheels for sharpening knives a polishing steel and silverware. In each of these the motor is vital element and much more satisfactory service will be obtai by giving this little machine proper care. Perhaps the m important point is to oil the bearings carefully, as frequently a suggested in the instructions furnished with the apparatus. Ma of these small motors rotate at extremely high speed, even up 10,000 revolutions per minute, and unless the bearing surfaces properly lubricated, excessive wear and heating will surely foll

Proper lubrication, however, means just what the instructions specify. If these read "two or three drops of oil in each oil hole once a month," this means *two or three drops* and no more. Too much oil is as bad as too little, for it is thrown into the electrical windings by rapid rotation, accumulates dust and grit, and causes

	Size in Watts	Unit of Service Hours necessary to equal 1 KWH of energy
Brazier (chafing dish heater)	125-500	8 - 2 hrs.
Broiler	1000-1500	1 - ⅔ hr.
Chafing Dish	440-600	- 2 hrs.
Coffee Percolator	300-500	3 - 2 hrs.
Curling Iron	15-25	70 -14 hrs.
Curling Iron Heaters	60-90	16 -11 hrs.
Disc Stove	200-660	5 - 1½ hrs.
Double Boilers	100-400	10 - 2½ hrs.
Egg Boilers	250-500	4 - 2 hrs.
Fans (8 inches to 16 inches diameter)	20-100	50 -10 hrs.
Fireless Cooker	600-660	- 1½ hrs.
Foot Warmer	100-400	10 - 2½ hrs.
Frying Kettle	500-1500	2 - ⅔ hrs.
Frying Pan	550-660	2 - 1½ hrs.
Griddle (7" x 11" to 17" x 18")	800-2000	1 - ½ hr.
Grill	500-600	- 2 hrs.
Hair Dryer	50-75	20 -14 hrs.
Heaters, Water (For entire house)	600-2000	1½- ½ hr.
Heating Pads	50-100	20 -10 hrs.
Hot Water Appliances	150-1000	7 - 1 hrs.
Immersion Hot Water Heaters	500-2500	2 - 2/5 hrs.
Irons	150-550	7 - 2 hrs.
Ironing Machine	2000-5000	½- 1/5 hr.
Oven—Portable Electric	500-2000	2 - ½ hrs.
Ozonizer	10-20	100 -50 hrs.
Saute Pan	250-660	4 - 1½ hrs.
Serving Tray Heater	300-400	3 - 2½ hrs.
Soldering Iron	100-200	10 - 5 hrs.
Table Range	-550	- 2 hrs.
Tea Pot	400-500	2½- 2 hrs.
Toasters	400-600	2½- 1½ hrs.
Traveller's Stove	-250	- 4 hrs.
Tureen	-300	3 hrs.
Waffle Iron	750-1200	¾- 1¼ hrs.

rapid deterioration. The motor must be carefully protected from water, too, since electricity readily leaks over moist surfaces and not only causes shock (p. 167), but sometimes damages the equipment. It may seem needless to urge care in preventing nails or similar obstructions from entering the motor casing, but extensive experience shows that this quite often happens. When the motor is running it acts as a magnet and, if loose nails are very near it,

they may be drawn inside the case and become jammed betv the revolving and stationary parts. This may either scrape covering off wires and provide an accidental path for the flo current which will destroy the motor, or it may bend the shaf other mechanical parts so that the machine is spoiled. When in use it is well to cover motors to exclude dust, and in general same care should be given this apparatus that is extended to o parts of the home equipment of equal value. Keep the moto a dry location where it will not absorb dampness. With such at tion the motors will prove invaluable servants, always ready work, starting at the touch of a switch and performing quietly efficiently as long as you desire.

Conclusion.—All household applications of electricity l been developed entirely in the last 35 or 40 years. During this t it has taken its position as one of the most indispensable elem of effective household operation. The rate of advance is increa continuously. It should be made a part of every household progr therefore, to visit the showrooms of the central company from t to time, to keep in touch with electrical advance and to make use of the advisory service offered by the local company.

QUESTIONS

1. What are the advantages, if any, of electricity over gas? Of gas, if over electricity?
2. In what way does an electric meter differ from a gas meter?
3. What is meant by a watt? A watt hour? A kilowatt hour?
4. What is a fuse? A fuse box? Where is the latter generally loc in a house?
5. What are the best sizes of electric globes for use in the home?

PROBLEMS AND DEMONSTRATIONS

1. Give some "Safety First" rules for handling electric appliances.
2. Find what rate is charged for electricity in your community.
3. Secure and explain a monthly service bill.
4. A customer used a maximum of 12 KWH at a 10 cent rate for the 30 hrs., 10 KWH at a 6 cent rate for second 30 hrs., and was giv discount of 1 cent per KWH for each portion. What was the am of the bill?

REFERENCES

ANDERSON, F. I., ELECTRICITY FOR THE FARM. The Macmillan Co.
KOESTER, F., ELECTRICITY FOR THE FARM AND HOME. Sturgis & Walton
LANCASTER, E. W., ELECTRIC COOKING, HEATING, AND CLEANING. D. Nostrand Co.

CHAPTER XV

TAXES

The governments of the country at large, the state, the county, the township, the independent school district and those of the city, town and village are supported by money raised through taxation. Each state fixes the limit of taxes that may be levied within the state. Taxes are assessed for specific purposes, such as maintaining public schools, fire and police forces, and the building and maintaining of roads in addition to paying the wages and salaries of public employees. The money assessed and collected for any specific purpose cannot be diverted from that particular purpose. For example, the amount collected as school-tax cannot be used for the maintenance of public roads.

There are two general forms of taxation in every state: that which is levied on real estate, which includes buildings, and that which is levied on personal property, such as automobiles, household furniture, stocks and bonds and money. There are many other kinds of taxes, chief in interest among them to the individual being the Federal income tax.

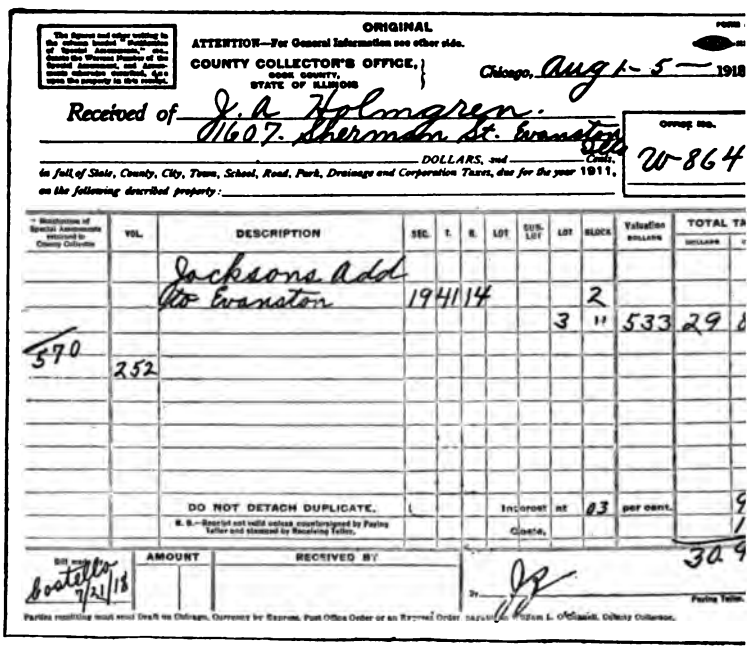
Real Estate Taxes.—The amount necessary to be raised to meet all public expenses is estimated by the governing unit. Officers called *assessors* visit during the year each home and each piece of property within the taxable district, and estimate the value of the real estate, the buildings and improvements thereon, together with the value of personal property owned by the citizens.

The amount necessary to be raised is then divided into the total value of the assessable property found, and the result is the rate of taxation to be levied. For instance, the assessable property of a community is $2,500,000 and in order to pay the expenses of the community for a year, $50,000 will be required. What will be the rate of taxation necessary to raise this amount? $50,000 divided by 2,500,000 gives us this rate, which is 2 per cent. of the total taxable property.

The assessors make detailed reports as to the value of all taxable property owned by each individual that they can locate. In the case of real estate the full value of the property is not generally assessed, but a fixed per cent. of that value is taken. As an illustra-

tion, say 60 per cent. The rate fixed is then applied to the asses value.

A man owns a house and lot which the assessors decide worth $10,000. The taxable value has been fixed at 60 per ce of the total value and the rate to be levied is 2 per cent. H much will the man have to pay in taxes? Sixty per cent. of $10,0 is $6000, and 2 per cent. of $6000 is $120, the amount of tax t must be paid.



ORIGINAL

ATTENTION—For General Information see other side.

COUNTY COLLECTOR'S OFFICE, Cook County, State of Illinois

Chicago, Aug 1- 5 — 1918

Received of J. A. Holmgren. 1607 Sherman St. Evanston Ills

DOLLARS, and Cents. in full of State, County, City, Town, School, Road, Park, Drainage and Corporation Taxes, due for the year 1911, on the following described property:

Office No. W-864

VOL.	DESCRIPTION	SEC.	T.	R.	LOT	SUB-LOT	LOT	BLOCK	Valuation DOLLARS	TOTAL TA DOLLARS
	Jacksons Add to Evanston	19	41	14				2		
							3	11	533	29
570										
252										

DO NOT DETACH DUPLICATE.

N. B.—Receipt not valid unless countersigned by Paying Teller and stamped by Receiving Teller.

Interest at 03 per cent. Costs.

Bill sent to Costello 7/21/18

AMOUNT

RECEIVED BY

By

Paying Teller.

Parties remitting must send Draft on Chicago, Currency by Express, Post Office Order or an Express Order payable to William L. O'Connell, County Collector.

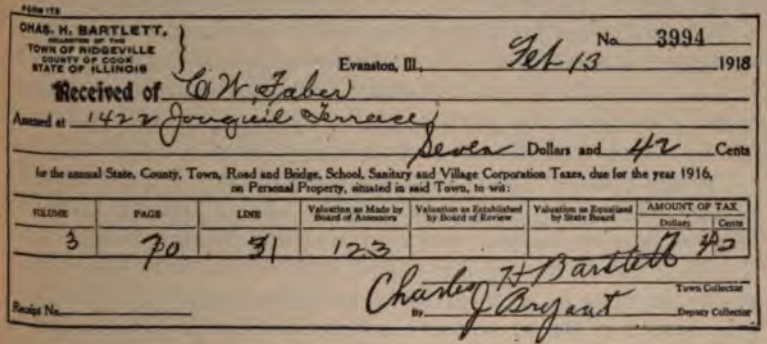
FIG. 20.—Tax bill, real estate

Fig. 20 is a copy of one form of Real Estate Tax Receipt.

Personal Property Taxes.—The value of all movable prope belonging to a citizen is assessed, and the rate of taxation is appl to the total value fixed by the assessors (Fig. 21). Household pr erty and personal property of all kinds is supposed to be includ in the returns made to the assessor; this includes live stock, s as horses and farm animals.

There is a great abuse of the personal property returns m

by many citizens. Property of this kind seldom is returned to the assessor at its full or real value. It is so easy to hide money, stocks, bonds, mortgages and similar property, or to remove them for a time from the state, that dishonest citizens have an opportunity of escaping from their just share of taxation, and, as a result, the amount of taxable property returned for taxation is just that much less, and the burden of taxation becomes heavier, in proportion, for the honest tax-payer. It is a notable fact that in nearly every community there are citizens of means whose names seldom, if ever, appear on the personal property tax-rolls, or, if they do so appear, the amount assessed against them is often so small as to cause question. For such reasons, there are those who favor the abolition



CHAS. H. BARTLETT,
COLLECTOR OF THE
TOWN OF RIDGEVILLE
COUNTY OF COOK
STATE OF ILLINOIS

No. 3994

Evanston, Ill., Feb 13 1918

Received of C. W. Faber

Assessed at 142 W Jonquil Terrace

Seven Dollars and 42 Cents

for the annual State, County, Town, Road and Bridge, School, Sanitary and Village Corporation Taxes, due for the year 1916, on Personal Property, situated in said Town, to wit:

VILLAGE	PAGE	LINE	Valuation as Made by Board of Assessors	Valuation as Established by Board of Review	Valuation as Equalized by State Board	AMOUNT OF TAX Dollars	Cents
3	70	31	123			7	42

Receipt No.

Charles H. Bartlett
Town Collector

By J. Bryant
Deputy Collector

FIG. 21.—Personal tax receipt

of the personal property tax, substituting for it a direct tax upon land and upon incomes.

Poll Tax.—Poll or head tax, as its name indicates, is a direct tax upon each individual citizen. The poll tax in many states has come to mean the road tax, or tax used for the maintaining of the public highways. It is usually fixed at two dollars, and some states provide that a man pay this tax by working one full day upon the roads in his district, or by furnishing a day's labor for the same purpose, or by paying the same in cash.

The local community must not only raise sufficient revenue to pay for its own expenses, but it must also contribute its share of the county and state tax.

General Tax Exemptions.—A certain proportion of personal property is usually exempt from taxation, the amount varying in

the different states. It may be $50 to $1000, as is the case in so states under certain conditions. The exemption may perhaps ap to widows, minor female orphans, unmarried women, war vetera or to mechanics' and farmers' tools, or to household furniture.

The property of the government, state, county and city is a exempt from taxation, as are cemeteries, charitable institutio libraries, religious societies and educational institutions, provid the property held by such organizations is used only for the purp for which they were formed.

For the reasons stated in the last paragraph, prospective p chasers of real estate should ascertain the amount of such untaxa property in the taxing district in which the real estate is locat as the burden of taxation may thus be unevenly distributed.

Where Taxes are Payable.—Aside from the income tax, th levied by the county, or by the state through the county, are paya at the office of the county treasurer at the courthouse at the cou seat. City taxes are payable at the office of the city treasu Town, school, and other local taxes are payable to local collect

When Due.—The date of the levying of taxes and the matu of the same varies in different states. After the tax is due interest penalty is added to the original tax, sometimes 1 per c a month, and if the tax is not paid by a certain date the prope is advertised to be sold for taxes, and then in due time the pr erty is sold at public sale and a Tax Sale Certificate is issued the purchaser. Up to this time the owner may pay the tax, he must also pay the interest required from the date the tax due, and also any penalty or cost allowed by the law of the st If this is not done the purchaser and holder of the Tax Sale Cer cate must hold the same for a certain period fixed by statute order to give the owner another opportunity to redeem his prope but if at the end of the period fixed by the state the owner does redeem, the proper official issues to the holder of the certificat Tax Deed. The holder of a Tax Deed assumes any incumbra that exists on the property at the time the deed was issued. Th are various technicalities involved that differ in various states, the question of the validity of Tax Deeds has long been a moo one in the various courts. Those who buy Tax Certificates usu do so for the sake of the high rate of interest allowed, rather t with any expectation of securing title to property.

Boards of Review.—Appeal may be made from the assessm

levied by the assessors to certain legal bodies, such a "Boards of Review." If the assessment is thought too high by the owner of the property such a board, on appeal, will investigate the contentions of the owner and re-examine the property if necessary, and if they find the assessment is too high, or if a mistake has been made in the same, the assessment will be lowered or corrected as the case may be.

Paying Taxes.—One should be sure that the description of the property mentioned in a tax receipt corresponds with the correct legal description, and that the proper names are inserted. If one pays taxes by mistake upon a wrong description there is no recourse, unless it be through the courts. Some other important points regarding tax payments are suggested by the following information which is printed on the back of tax receipts issued by Cook County, Illinois, and while specifically it applies to this one county, it may apply in some respects to any county.

"1. Real Estate taxes are not assessed in owner's name nor by house number. When writing for bills or for information, you must give the legal description:

Subdivision. Section. Town Range. Lot. Sub-lot. Lot. Block.

"2. Examine bills carefully before paying them. See that all legal descriptions are correct; that they cover ALL property on which you wish to pay and no other. The County Collector is not responsible for payments made on wrong property.

"3. Corrections should be made on both the original and duplicate bills. Do not detach duplicate from original.

"4. Special assessments and installments due each year are payable to City and Village collectors until March 10th; and to this Office after April 1st.

"5. On general taxes a penalty of 1 per cent. is charged after May 1st, 2 per cent. after June 1st, 3 per cent. after July 1st, and so on, until paid. In addition to this advertising and copying costs of 19 cents for each lot or part of lot, and 29 cents for each tract of land, are added to unpaid general taxes and special assessments early in May.

"6. Make remittances payable to William L. O'Connell, County Collector, and enclose tax bills and return postage. All remittances are at the risk of the sender.

"7. Be sure and give your name and proper post office address.

"8. Receipts are held ten days, and during the rush period a little longer, to permit verification by our Auditors.

"9. The sale of unpaid taxes begins early in August.

"10. For information about tax sales or back taxes, write to the County Clerk. This Office has only the tax books for the current year.

"11. For information about valuations, write to the Board of Assessors."

The taxing body is not required to notify a person that his taxes are due, but it is assumed that everyone knows when they are due and will appear at the proper place to ascertain the amount due,

and to pay the same. If notice is sent tax-payers it is usuall a matter of courtesy.

If in doubt in regard to one's income tax the local postoffic bank will probably be able to give the necessary information. formation regarding city taxes should be sought at the office of city treasurer, and regarding county and state taxes at the c of the county treasurer at the county seat.

Special Taxes.—The Federal government also levies taxe the form of duties upon certain imports and also upon cer articles raised or manufactured in this country, such as tob products. The latter taxes are called Internal Revenue taxes

During emergencies, as war, the Government levies special t such as a stamp tax on legal papers, notes, checks, mortgages, The Income Tax of the Federal government, and in certain st is a recent innovation.

The various states, as well as political subdivisions, such as c ties, and also towns and cities, have various forms of special taxa for the purpose of raising money to help defray the expense government. Among such forms for taxation may be menti the tax placed upon certain businesses in cities, such as the fe conducting an employment agency, which tax is generally sp of as a license; also the wheel tax on automobiles, carriages, wa and trucks. Another form is the dog tax, which is generally le more as a possible abatement of what might become a p nuisance rather than for revenue.

Some Objections to Present Schemes of Taxation.— difficulty of securing honest returns of personal property taxes, the resultant burden upon the honest tax-payer has already mentioned. Another objection, however, has been raised ag present methods of real estate taxation.

An industrious citizen, after years of careful saving perl purchases a vacant lot. Values of real estate in the entire n borhood may have been lowered as the result of this idle lot, w has perhaps grown to weeds or been used as a dumping-gro In time, the purchaser of the lot invests his later savings in b ing a home upon this lot. The new house, with the now gr lot, perhaps laid off into lawns and gardens, is a direct asset t neighborhood, and values begin to go up. The builder has ren a distinct and valuable service to the community, but he is virt taxed for making the improvement. The more he improve

property the more will he be taxed, and the more he improves it the greater will be the rise of assessable property in the neighborhood; for, as the latter is benefited, values go up and taxes increase. Another individual revolutionizes an entire district by erecting a costly building upon a piece of property. Values in the neighborhood go up as the result of this man's courage and industry. This public benefactor is assessed heavily, while a neighbor who for years may have selfishly refused to improve a vacant piece of property, or who may have refused to keep in decent repair some old structure that already has depreciated neighboring property, suddenly finds his property increased in value many fold as the result of the improvement of the other party. Instead of having a piece of land worth $5000 the latter may find it has raised in value to $50,000, and all without any effort on his part. He has done nothing to earn this difference of $45,000. Such differences are called "unearned increment." The new rate of taxation charged against this unearned increment would be pitifully small compared with the net profit held by this selfish citizen, who has waited years perhaps for others to invest their money and make his own property really valuable. Such facts as these illustrations are the basis for a demand for relatively heavier land taxes in cities, and relatively lighter taxes on buildings, and also for the "Single Tax" on land values.

The Single Tax.—The Single Tax, if adopted, would mean that all taxation would be based upon land values, irrespective of buildings, and no taxes would be levied on buildings. By this scheme a person would not be taxed for his efforts to improve his own interests, which in turn enhance the values of neighboring property. It also means that "unearned increment" would bear its proper share of taxation. If a new million-dollar hotel converted a run-down residence street into an active business street, the owners of the land on that street would be taxed in about the same proportion as the owner of the lot upon which the hotel has been built. While economists hold the land tax as a sole tax to be an impractical scheme, many of them are favoring relatively heavier taxes on urban land than on buildings.

Income Tax.—The abuse of the personal tax system has perhaps done much to bring about the income tax, which is a tax levied by the government, and, similarly, by a few states, upon the income of its citizens. It has only been within the last few years that

citizens of this country have been compelled to pay an income tax to the Federal government, although for some time such taxes have been levied in other countries. The amount levied in this country, however, except for its war increase, is the lowest income tax assessed by any country. Advocates of the income tax claim that it equalizes the burden of taxation, in that those possessing the greater proportion of the wealth of the country must assume the larger part.

There is exempted from income tax a personal exemption for the unmarried person, and for the married couple, and there is also exempted life insurance paid on the death of a policyholder and payments made to the insured on life insurance contracts such as annuities and endowments, gifts and bequests, and the compensation of employes of a state or its political subdivisions.

In order to find net income subject to taxation, there is subtracted from the total or gross income interest paid on indebtedness within the year; necessary expenses of carrying on business; losses actually sustained during the year that are not compensated for by insurance; reasonable wear and tear, and debts that prove during the year to be worthless and uncollectible. But family or personal living expenses, or payments made for improvements, or for new buildings or that which increases the value of property cannot be deducted from the income.

Those with incomes subject to taxation, must file returns with the internal revenue collector, showing source of income and the deductions allowed; this "return" must be made if one's income exceeds the exemption, even if the exemptions and reductions make one not liable for any tax upon the income. Failure to make return, and fraudulent returns are punishable by fines. Returns must be made on official blanks to the United States District Revenue Collector, and payment of the tax must be made to him.

Inheritance Tax.—In recent years there has been a tendency on the part of various states to pass laws taxing inheritances.

Such taxes usually are at a higher rate for large estates and a minimum amount is exempted from taxation. Property going to distant relatives, or persons not related to the decedent, is often taxed at a higher rate than that passing to immediate relations. The great increase in private fortunes and the centralization of wealth in the hands of a comparatively small number of individuals appears to be a menace to the ultimate welfare of the majority of citizens, and this form of taxation was devised, not only for pur-

poses of revenue, but also to reduce the size of individual fortunes, and perhaps to distribute them in forms that might directly benefit the state at large. Wealth left for charitable purposes or as benefactions to the community at large is generally exempt from this form of taxation. Again, it is supposed that heavy inheritance taxes may induce the wealthy to make some distribution of large estates during their life-time, which will serve to break up vast accumulations. It is not beyond the range of possibility that the time may come when the rate of the inheritance tax may be advanced so as to prove a decided check upon the centralization in one family of mammoth fortunes.

QUESTIONS

1. What is the principal duty of an internal revenue collector?
2. What is meant by the Single Tax?
3. What is meant by Personal Property Taxes? What do Real Estate Taxes include? What is the Poll Tax?
4. What is an "Assessor"? How is the rate of taxation determined?
5. What objections can you name to our present forms of taxation?
6. What is meant by "Unearned increment"? Can you cite an illustration of this in your community?
7. Explain the purpose of the Income Tax.
8. What is a Tax Certificate? A Tax Deed?
9. What war taxes are now assessed?

PROBLEMS AND DEMONSTRATIONS

1. Where is the office of the Collector for your district?
2. Who is the County Treasurer of your county and where is his office? The City Treasurer?
3. Secure a copy of a tax receipt and study it carefully.
4. When are taxes due in your county? When must they be paid? What is the penalty for not paying them when due?
5. If possible, secure a Personal Property Schedule and fill it out.
6. Does your state levy an Income Tax? An inheritance tax?
7. Name the forms of taxation that obtain in your city or county. Are Poll Taxes levied in your county?
8. What body constitute the Board of Review in your county?
9. What are the personal tax exemptions in your state?
10. What real estate is exempt from taxation in your community?
11. A city is obliged to raise $50,000 in taxes with which to pay its expenses for the coming year. The value of taxable property is $4,000,000. What will be the tax rate?
12. Mr. Franklin owns property to the value of $8000 and the tax rate, based upon 20 per cent. of this value, is $12.50 per thousand dollars; what will be his taxes?
13. Mr. Jones has an annual salary of $3000. His wife has an income of $2000 a year. Is Mr. Jones subject to the Federal Income tax? If so, what will be the amount Mr. Jones must pay?

14. Mr. Law has a gross income of $20,000 a year. Last year he was co pelled to write off $5000 from his books as worthless debts. His w has an annual income of $10,000 a year. What Federal income t will Mr. Law have to pay?
15. Get a "return" blank for the Federal income tax from your local po master and explain the entries called for.

THEMES FOR DEBATE

Resolved:

1. That a proper inheritance tax is necessary for the preservation of Democracy.
2. That the Single Tax is the most just and logical system of taxation.
3. That tax exemptions should be allowed for each dependent child in family.
4. That unmarried men and women competing in the business world w married men should be subject to a special tax.

REFERENCE

FILLEBROWN, TAXATION. A. C. McClurg & Company.

CHAPTER XVI

FIRE INSURANCE

first fire insurance company in this country was organized in lphia in 1752, with Benjamin Franklin as one of its pro- This company is still in existence. There are now over lred fire insurance companies doing business in the United but about fifty of these companies carry nearly a quarter of re amount of insurance in force.

country has witnessed four great fires. Chicago, in 1871, amounting to 96 million dollars; Boston, in 1872, loss 52 ; and the comparatively recent fires at Baltimore entailing 60 millions, and at San Francisco of 175 millions. There bly no country in which the fire loss is so great as it is in ted States. This has largely been due to the predominance en structures, carelessness in construction and lack of proper on from fire.

ns Used.—Such terms as "policy" and "premium" in fire e have the same meaning as in life insurance. The policy tract made between the insurance company and the person s for the insurance. The premium is the amount paid at intervals by a person in return for protection or other bene- anteed to him as the holder of the policy.

niums in fire insurance, instead of being based upon the e based upon the term of protection covered by the policy. ount of the premium is not the same year by year during of a policy, as is the case in life insurance, but varies accord- he term of the policy. The premium for a single year's rance, for instance, might be $7.50 for $1000, but if the vas written for three years, or five years, the annual cost e less in proportion.

ire insurance the term "rate" is much used, which is merely s for determining the amount of the premium. Fire insur- charged for at so much per hundred dollars. The rate, for e, might be 45 cents per hundred, which would make a d dollar policy cost $4.50.

ndard Policies.—At one time the policies of the various

companies differed in many respects, but in 1875 Massachusetts required that all companies doing business in the state must use a standard form of policy, and in 1886 New York adopted a similar form, and since then practically all companies use what is known as a "standard" policy.

"Valued" Policies.—About twenty states have passed laws requiring a policy that will compel a company to pay the full amount of a loss if the amount of the policy is in excess of such loss, regardless of any other insurance the insured may carry, providing there is no evidence of fraud on the part of the insured. If a building valued at $10,000 is insured for $5000 and suffers a loss of $3000 by fire, under such a valued policy, the company must pay the full loss, $3000. In some states depreciation in the property may be deducted from the amount due.

In case of loss, if a building were covered by three policies in different companies for one thousand dollars each, and if the loss sustained only amounted to fifteen hundred dollars, each company would pay its proportionate share of the loss, which, in this case, would be five hundred dollars each. If one company held a policy for two thousand dollars and another a policy for one thousand dollars, the company holding the larger policy would pay the larger per cent. of the loss.

Co-Insurance Clauses.—Wherever permitted by law to do so insurance companies generally insist upon a co-insurance clause in their policies, which requires an owner to insure his property up to 80 per cent. of its value, in order to get the full return for his loss; if he does not carry that proportion of insurance he is figured as assuming himself the risk for the difference between this 80 per cent. and the actual amount for which he is insured, that is, he becomes a co-insurer with the company. As an illustration, if property valued at $10,000 is insured at $8000, this represents 80 per cent. of its value, and should a loss by fire equal $3,000 the insured would be paid the latter amount by the insurance company. If, however, the original insurance was only $5000 and the loss $3000 the insured would not receive the amount of the loss under such a clause, as he is supposed to carry 80 per cent. of the value in insurance, whereas he only has 50 per cent. insured. Not having the requisite amount of insurance in force he is supposed to be carrying his own risk for the difference between the 80 per cent., which would be $8000, and the face of the policy,

in this case, $5000. In other words, the owner is supposed, in this instance, to carry at his own risk $3000 worth of the insurance.

The owner's risk would represent three-eighths and the insurance company's five-eighths, so the amount paid the insured on a $3000 loss under such circumstances would be $1875.

In taking out fire insurance one should ascertain if the laws of the state permit of a "co-insurance clause," or whether they demand a "valued policy clause;" and notice the type of policy you have. The co-insurance clause, however, does not generally apply to dwellings.

Buildings.—Buildings are insured against loss or partial loss by fire, or by damage sustained by water in putting out a fire. Loss by wind storms and tornadoes is not included in the usual fire insurance policy. A special policy is written to cover such contingencies. Loss by lightning will be assumed by all companies by endorsement.

The rate charged for fire insurance depends, in part, upon the character and construction of the building, whether frame, stucco, brick or stone; shingle roof, slate or other fire-proof roof; and also upon its location in relation to other buildings, and to the water supply. A frame building within a few feet of another frame building would bring a higher rate than a frame building standing by itself, or than a brick building, as in the latter case the danger from fire would be less. The purpose for which a building is used is also taken into consideration. A munitions factory, where the danger from explosion would be great, would demand an almost prohibitive rate.

Policies generally prohibit the storing of explosives, and limit the amount of chemicals and kerosene that may be stored in or near a building covered by insurance.

Privilege to store gasoline or naphtha must be obtained by special endorsement.

Vacating Insured Property.—If a building becomes vacant it is necessary to secure a special vacancy clause from the insurance company to be attached to the policy, so in moving from an insured residence the owner should procure from the insurance company such a vacancy clause. This is generally required within ten days after a building is vacated. If such a clause is not issued the policy is void. In some states occupancy of the building for a few weeks during the year may make insurance possible.

Amount of Insurance.—The amount of insurance that a company will accept upon a building depends upon its value, its construction and its location. If the risk is too great, or more than one company might be willing to assume, it is customary to divide the risk by apportioning the amount of insurance among two or more companies.

Adjustment of Losses.—If a loss by fire is not a total loss insurance adjusters examine the property and estimate the loss sustained, and that part of the full policy is paid the insured. Most policies provide that the company may, if it desires, replace the building destroyed or repair the damage sustained in place of paying the cash to cover the loss. This is another protection against fraud.

Insurance of Mortgaged Property.—When money is loaned on a building, or other personal property, an insurance policy is generally required to protect the lender. A clause in such a policy generally reads "payable to the mortgagee as his interests may appear." So long as insured property is encumbered by a mortgage such a clause must be a part of the policy, although the total insurance is much more than the amount of the encumbrance. In case of loss, any money left after paying off the encumbrances would go to the owner.

The interest of the owner, as well as that of the mortgagee, should be protected by insurance.

Furniture Insurance.—Every home should carry insurance to cover the value of the furniture and fittings. It would be a heavy burden for any family to replace at any one time the entire furniture and furnishings of a home.

For this purpose it is desirable that a Family Invoice be kept. In this invoice, on cards, or in a book, should be written the name of every important piece of furniture, every valuable picture and rug in the house. If possible, the date of purchase should be entered, as the age of an article would be considered by an adjuster in estimating a loss. The price paid or the value should also be entered.

Although no company *requires* a list of articles thus insured, it would be an added protection to make a copy of such a list. A form for such an inventory page is shown in another chapter. Such an inventory should be kept, of course, away from home where it would not be destroyed by a fire that destroyed the property inventoried.

If a family moves, the change of address should be recorded with

the agent issuing the insurance, so that the property covered by the policy may continue to be protected and signed permission secured from the agent.

QUESTIONS

1. What is meant by a policy?
2. By the term "premium"?
3. What is meant by "Rate"?
4. Would an insurance policy cost any less in proportion for three years than for one year?
5. What factors determine the rate charged for fire insurance?
6. Which would cost the most to insure, a frame building, a stucco house or a brick building?
7. Which would probably cost the most to insure, a frame residence between two other frame residences, each one thirty feet from the insured structure, or a frame house on a corner, and fifty feet on the other exposure from the nearest dwelling?
8. What is meant by a "valued policy"? Does the law of your state provide for such a policy?
9. What is meant by a "co-insurance clause"? Does the law of your state permit of such a clause in fire insurance policies?
10. Procure sample fire insurance policy and look over carefully its principal features?
11. What is meant by a "mortgage clause" in a fire insurance policy?
12. If not living in a rented house or apartment find out if the building is insured.
13. Ascertain if your family carries insurance on household furniture.
14. How much would it cost per hundred to insure your house or apartment?
15. Your furniture and furnishings?

PROBLEMS AND DEMONSTRATIONS

1. A building valued at $10,000 is insured for $8,000. The policy which is "valued" contains a mortgage clause, as the building is mortgaged for $5,000. In case the building was totally destroyed by fire, how much insurance would the owner receive?
2. A church is insured for $5,000 at the rate of 75 cents per hundred for one year. What is the premium?
3. A residence was insured for $2,000 for one year at 75 cents per hundred. At the expiration of the policy, it was reinsured for the same amount at the rate of 50 cents per hundred for five years. How much was saved by insuring for a five-year-period, rather than year by year for the same length of time?
4. A house was insured for $2,000 for one year, and the premium was $20.00. What was the rate charged per hundred?
5. A store building valued at $20,000 was insured for 80 per cent. of its value at a rate of $1.20 per hundred for five years. How much was the premium?

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CHAPTER XVII

FOOD FOR THE FAMILY

EXPERIENCE has shown that an adequate diet cannot be one-sided. Nature rebels at monotony in food. The chemical and physiological laboratories have demonstrated why such a diet will not promote health and normal development.

Needs of the Body.—Food is needed by the body for several reasons:

1. To *build* new tissue especially in the growing child and to *repair* broken-down tissue. The body tissue is continually being used up in the work of the body, and must be constantly renewed as part of the normal life process. During the years of growth and after special bodily strain as in illness, special attention must be given to the supply of foods rich in protein—the tissue-building material.

2. To furnish energy for work and heat to keep the body warm. The normal body temperature is 98 degrees, Fahrenheit. If we are cold, we shiver, *i.e.*, contract the muscles, and by this exercise are warmed. This uses up more food. The involuntary muscular work that is going on within us all of the time requires energy. The heart expands and contracts to pump blood through our bodies, the chest rises and falls to supply air to the lungs and there is almost continued movement in the alimentary canal where foods are being digested and the products moved along. The unconscious, external movements, like the winking of the eyelids and the conscious movements of our hands in writing, playing the piano, or knitting, all require energy, which must be obtained from our food.

3. Food as a body regulator. Some balance wheel is needed so that the body processes. such as respiration, digestion and the circulation of the blood, will go on smoothly.

Food is to the body what gasoline is to the engine—and more—because our food can both build up and repair our bodies as well as furnish the motive power, while help from without is needed to renovate an automobile.

Let us follow the suggested classification of food materials as

in Chapter VI and see what the relation of each is to the
in body.

a) Meat and Meat-like Foods.—Such foods are rich in pro-
the material which supplies nitrogen to the body, builds it
nd renews the wasted tissues. This substance is especially
ed by children for growth, but is also needed by all to replace
-out body structures.

'his group serves also as a source of body fuel, but is much
xpensive to be largely used for such a purpose and should be
erved. Dr. Graham Lusk says that protein taken in excess
resents luxury and waste." The amount and kind of tissue-
ler needed depends upon the age, size, sex, and occupation of
person. We do not need so large an amount as has formerly
thought necessary. There are possible dangers in giving the
more protein than it can safely take care of. It is usually
ated that 90–100 grams (2.86–3.5 ounces) of protein ob-
d from a varied diet gives a safe daily standard for a healthy,
ous man, weighing 150 pounds, and that 70 grams (2.5
es) is needed for a woman in good health and of average size.[1]
leat, besides being a source of protein, is important on account
extractives which stimulate the flow of the digestive juices.
we need not be afraid to reduce the protein in our diet is
n by a statement regarding the food situation in England,
"The British have suffered no hardships in the present reduc-
of their meat ration."

or children, whole milk should be the chief source of the daily
in, and milk is a very desirable food for adults. For other
es, see Chapter VI.

b) Grain Foods, Sweets and Fats.—Food from these three
s is the principal source of energy. Neither sweets nor fats
uild tissue. Some grain foods as rye, barley and oats can build
, but most of them are relatively poor in protein, even when
ntire grain is utilized. The carbohydrates, that is, grain foods
sweets, are usually cheaper than fats and should, therefore,
pended upon as the chief source of energy.

'ats, though not so abundant in the diet, are important not only
he energy they supply, but also because some of them insure
resence of certain substances, described later, which are present
lution in animal fats.

[1] Ten Lessons on Food Conservation—*U. S. Food Administration*, 1917.

Fats as a source of energy supply per unit two and one-fourth as much heat as does the same amount of carbohydrates. Their high cost and comparative difficulty of digestion make them less available than carbohydrates as a source of heat. Fat also serves another valuable function in the diet, namely, that of making food more palatable by its flavor.

The amount of fat should be from 40 to 60 grams as purchased (1.41 to 2.12 ounces) per day per person.

(c). Fruits and Vegetables.—These products are important for several reasons. They are the chief source of the mineral matter which keeps up the general "tone" of the body and builds the bony structure—the skeleton and teeth. Mineral matter is also furnished by milk, eggs, fish and lean beef. The three principal minerals are iron, phosphorus and lime. The bony structure of the body is largely lime; the red color of the blood, as well as its power to carry oxygen to the cells of the body, is due to iron; while the phosphorus found in each cell helps to convert food into body tissue, heat and energy. The following list gives the foods rich in these minerals:

FOODS RICH IN THE THREE PRINCIPAL MINERALS[1]

	Iron	
Lima beans (dried)	Oatmeal	Sweet corn
Navy beans	Raisins	Dandelion greens
Peas (dried)	Prunes	Walnuts
Entire wheat flour	String beans	Peanuts
Spinach	Potatoes	Grapes
Lean beef	Cornmeal	Honey
Eggs	Cabbage	Lentils
	Phosphorus	
Peas (dried)	Oatmeal	Potatoes
Navy beans	Lentils	Turnips
Egg yolk	Peanuts	Barley
Lean beef	Almonds	Cocoa
Milk	Walnuts	Dried sweet corn
Cheese	Prunes	Fish
Entire wheat flour	Rice	Dried figs
Buckwheat flour	Parsnips	Gooseberries
	Lime	
Milk	Oatmeal	Carrots
Eggs	Walnuts	Oranges
Cheese	Peanuts	Prunes
Beans	Parsnips	Celery
Peas	Cauliflower	Spinach

[1] "Food for the Family," *Oregon Agricultural College, Bulletin No.*

Fruit acids give flavor and stimulate appetite. These acids, ether with the bulk of both fruit and vegetable foods, tend to vent constipation. The human body requires considerable ɔughage" as the indigestible portions of food are called, in order t the alimentary canal may perform its functions.

(d) Other Necessary Substances.—There are two other subnces which act as body regulators and growth promoters. Through oratory experiment they have been found to be absolutely necesy to normal development. Little is known about them except t one is soluble in fat and the other is soluble in water. These known also as "Vitamines."

The "fat-soluble A" substance is less widely distributed and found in milk, eggs, liver and kidney fats, suet and the *leaves* plants. Butter and egg yolk are excellent sources for it.

The "water-soluble B" substance is found in nearly all foods. ept polished rice, fats from either animal or vegetable sources, ars and starches.

Dr. E. V. McCollum says that almost without exception the seeds plants (cereals) are deficient in this fat-soluble substance. erefore cereals must be supplemented in the diet by leaves of nts, whole milk or butter fat.

Eye-trouble is one of the serious effects found in children whose t lacks this fat-soluble material. In Scandinavia, where chilɪn had been fed separator milk, eye-trouble resulted. It was ınd that the infection, unless it had gone too far, could be quickly cked by the substitution of whole milk.

(e) Food Must be Palatable.—Food must not only contain the essary food constituents, but it must also be made attractive and atable. One of the most important rôles that meat and sea foods ıy in the diet is due to this characteristic. If the flavor of meat ı be extended to vegetables and grain foods, good digestion may insured and much money saved. Monotony in the diet, which abhorrent to so many, may also be varied by the expert use of vorings and condiments as well as by the careful use of fats. hether the food looks well, tastes good and thus causes a sense pleasure may often retard or aid digestion. It is largely in the ilful preparation and serving of food following the wise choice of od materials, that the secret of healthful diet and food economy s.

Milk and Milk Products.—Milk is a complete food for the

young animal and adults should use much more of it than they do. Whole milk, skim-milk and cheese contain an abundance of protein. There are also very valuable mineral salts in milk, which resemble those inorganic substances found in green leaves. Milk, butter and cheese are excellent as sources of energy. The growth-promoting substance, fat-soluble A, is also found in whole milk and butter fat. Since grains are deficient in this fat-soluble substance, milk makes a good supplementary food for foods made from the seeds of plants. It is also palatable and should be found in much larger proportions in almost all dietaries.

With this increasing knowledge of the value of milk, experts are everywhere urging its wider use. Dr. Graham Lusk says, "Let no family of five persons buy meat until it has bought *three* quarts of milk, the cheapest protein food." Nor need this milk be taken raw. It may be used in custards, puddings, creamed dishes, etc. Since the fat-soluble substance is in the cream, it is necessary to use whole milk to supply it, while for protein only skim-milk is necessary. As heat does not injure the body-regulating substances, milk may be used in cooked food or as a drink. Those who work with the poor and advise dependent families are now recommending that as much money be spent for milk as for meat.

The ideal is that the food of every adult should contain one pint of milk a day and that of children 1½ pints, or better, one quart.

Value of Water in the Diet.—Water constitutes nearly three-fourths of the weight of the body. It acts as a solvent of food material and forms an important part of every secretion of the body. It is found in nearly all food material, especially in fruits and succulent vegetables. It does not yield energy or build tissue, but it is not likely to be taken in too large quantities. It may be taken at meals as well as between them.

Another Aspect of the Food Requirements.—We have seen what food materials are needed for normal development and have considered their effect in the body and their sources. How do we estimate the amount of food we need to enable the body to do its work?

The automobile will go just so far on a given amount of gasoline. If it has less gasoline it will not run so far. If it has more it will run further. Just so with the human body and its food supply. If we eat food enough to give us the right amount of energy we can

do our day's work effectively; if we do not have enough food we do not accomplish our work so well. If we have an oversupply, it is stored in the body as fat and muscular tissue, and unlike the engine, we do not do our work quite so efficiently. In the case of the automobile the energy furnished by the gasoline is measured by horsepower; in the case of the human body the energy from the food is measured by the calorie or the amount of food which burned as fuel will raise the temperature of a cubic centimetre of water one degree Centigrade. Every food product, therefore, has its definite energy value. One calorie is too small a portion to be conveniently reckoned with, so that in practice 100-calories is called the standard.

Examples of 100-Calorie Portions.—If we have a mental picture of 100-calorie portions we may see how nearly it approximates the usual amount of foods served.

APPROXIMATE AMOUNTS OF FOOD TO YIELD 100 CALORIES

Cooked or flaked breakfast foods	¾–1¼ cups
Milk	⅝ cup, whole; 1⅛ cups skim
Cream	¼ cup, thin; 1⅓ tablespoons, very thick
Butter, olive oil, or any other kind of fat	1 tablespoon
Bread	1 slice 3 in. x 3½ in. x 1 in.
Uneeda biscuit	4 crackers
Fresh fruit	1 large orange or apple; 1 medium banana or bunch of grapes; 2 medium peaches or pears
Dried fruit	4 or 5 prunes or dates; 2 dozen raisins; 1½ large figs
Eggs	1 exceptionally large; 1⅓ medium
Meat (beef, lamb, mutton, veal, chicken)	About 2 ounces of cooked lean meat
Bacon (cooked crisp)	About ½ ounce (4 small thin slices)
Potatoes	1 medium
Sugar	1 tablespoon granulated; 3½ "full-size" lumps
Cocoa (made with milk)	⅘ cup
Cream of bean soup	½ cup
Macaroni and cheese	½ cup
Rice pudding	½ cup
Ice-cream (made with thin cream)	¼ cup
Milk sherbet	¼ cup
Sponge cake	1 large individual cake
Nuts (shelled almonds, peanuts, pecans)	About ½ ounce
Sweet chocolate	About ¾ ounce

The authors in "How to Live" [3] say that "many people eat too much; that is, too many calories; some eat too little; that is, too few calories." We make the mistake of measuring our food by its weight, per pound, or by bulk, per cup, rather than by its fuel value or so many calories. Some foods are concentrated, like sugar, and contain many more calories per unit than others. It takes a pound or more of vegetables, tomatoes, cucumbers and lettuce, which are bulky, and have high water content, to equal three and one-half cubes of sugar, which is a 100-calorie portion.

The Daily Energy Requirement.—Energy requirement differs with age, size and occupation as does the amount of food materials. Greater muscular activity means that more fuel is needed. Therefore the person doing sedentary work will require fewer calories per day than the lumberman, the mail carrier, farmer or soldier. Generally the increase should be chiefly in the fuel foods like fats, cereals and sweets, rather than in the expensive protein. Following is a table which gives the calorie requirement for 24 hours for a man of average size, say 150 pounds weight:

DAILY ENERGY REQUIREMENT

Occupation	*Calories per man per day*
In bed twenty-four hours	1600–1800
At rest but sitting most of day	2000–2300
Work chiefly done sitting	2200–2800
Work chiefly done standing or walking	2700–3000
Work requiring muscular strength	3000–3500
Work requiring very severe effort	4000–6000

"Nature Counts Every Calorie Carefully."—Consider the effect upon your calorie intake of the "bite" between meals. A small egg-nog yields about 233 calories. One-fourth a cup of ice-cream or sherbet, 1½ large figs, 1 tablespoon or a one-inch square of fudge and 1 large apple or orange, each yield 100 calories. These "bites," together with the accessories, cream, sugar, raisins and syrup, eaten at meal-time, all must be taken into the account, and by them, the daily calorie intake will be greatly increased. When food enough has been taken, to eat another slice of bread is waste and a menace to health.

How to Select Food.—From the foregoing discussion it will be seen that the day's food should be chosen so that each type of

[3] Fisher and Fiske, published by Funk and Wagnalls.

food material is represented—namely, fruits and vegetables for mineral matter; meat and meat-like foods, as eggs, legumes, milk and cheese, for growth and repair; cereals or grain food, sweets and fat for energy, and such foods included as contain the regulating substances, "fat-soluble A" and "water-soluble B."

We must not forget that some foods in the cereal group contain protein and mineral matter, although for convenience they were grouped with reference to their major constituent—starch. Potatoes, while mainly valuable for the carbohydrate, starch, also furnish mineral matter, acids and cellulose. Tubers, like Irish and sweet potatoes, contain less fat-soluble A than the leaves of plants, like beet greens, spinach and lettuce. Meat usually contains fat as well as protein.

What to Select.—There are a few simple rules which help in making out a balanced ration which shall serve the demands of both health and economy.

Because protein foods are the most expensive one should select the cheaper forms if such can be done without injury to the food value. As was said earlier, less protein in the form of meat can be safely eaten by most people. Not more than 30–40 per cent. of this tissue-builder should be taken from meat, poultry, fish, game, milk and eggs—cereal grains, such as wheat (entire grain), oats, barley, rye and corn, should furnish from 25–33 per cent. of the total; root vegetables, legumes, succulent vegetables, fruits and nuts furnish the remainder.

Be sure that the day's food also contains the recently found accessories, fat-soluble A and water-soluble B. The presence of the former is assured by milk, butter-fat, and green-leaved plants, such as salads and pot-herbs. Remember that water-soluble B is present in whole grains, fruits and vegetables, as well as in meat, milk and egg yolk.

Rules to Follow in the Selection of Food.—These additional rules will help in the selection of food and should be borne in mind in planning meals:

1. Foods should be selected because of their food value, not simply because they are cheap, easy to obtain, or happen to suit the taste of the family. Likes and dislikes in food are chiefly the results of home training.

2. Plan for the children first. A quart of milk per day is none too much for each child.

3. Use cereals (flour, meal, rice, cereal breakfast foods, etc.), freely. Vary these from day to day in kind and in method of preparation that the family may not tire of them.

4. Do not serve the same food in different forms at the same meal, as chicken soup and creamed chicken. It is well not to duplicate foods or flavors on the same day.

5. Include in every meal milk and easily digested food for the children, invalids and aged. More hearty food may be served for vigorous adults.

6. Serve heavy soups (cream) and heavy desserts (rich pies) with a light main course, and *vice versa*.

7. Variety gained through methods of cooking, flavoring and ways of serving keeps the family content with inevitable repetition —as, for example, in the daily serving of potatoes.

8. Be careful not to serve too much tissue-building material in one meal. Roast beef and cheese souffle would be a bad combination.

9. Too much starch should be avoided at one meal, as, for example, potatoes and hominy.

10. "Pernickety" food habits can be avoided if children are served proper amounts of food, carefully prepared, and are expected to eat it.

The following skeleton plan[4] gives suggestions for menu building:

PLANS FOR MEALS

BREAKFAST PLAN

1. Fruit in some form.
2. Cereal.
3. Some muscle-building dish, such as eggs, fish, or small amount of meat.
4. Some form of bread.
5. A hot drink.

LUNCHEON OR SUPPER PLAN

1. A hot dish such as meat; or a hot meat substitute dish, such as macaroni and cheese; or a cold meat; or a heavy salad; or a cream soup.
2. Potatoes and bread.
3. Some form of dessert.
4. A beverage, if desired.

DINNER PLAN

1. A light soup, if desired.
2. Meat.
3. Potatoes or some other starchy vegetable and some flavor vegetable. Bread.
4. A relish or flavor food, which may be served in the form of a salad.
5. Dessert.
6. Beverage, if desired.

[4] "Food for the Family." *Bulletin of Oregon Agricultural College.*

Balancing Menus.—After all that has been said a critical study of the following menus will be of value:

No. I	*No. II*	*No. III*
Rice soup	Creamed pea soup	Vegetable soup
Potatoes	Fish	Meat or poultry
Macaroni	Meat and poultry	Rice, potato or hominy
Rice pudding and hard sauce	Peas or beans	Spinach
	Rye bread	Tomato salad
Bread and butter	Mince pie and cheese	Plain ice-cream
	Nuts	Oatmeal wafers

Menu No. I is very high in foods which supply heat. Minerals are almost lacking except the small amount in the bread and potato. There is practically no protein except in the soup and bread. There is too little fat.

Menu No. II is much too high in tissue-building foods or protein. The grains are barely represented and then by rye, which is rich in body-building substance. Peas served twice is bad, and the soup is too heavy.

In Menu No. III all five food groups are represented, as well as fat-soluble A and water-soluble B; spinach furnishes iron as well as bulk.

Food Economy.—One important item has already been given about food economy, namely, save on meat. In the chapter on marketing there are many helpful suggestions of ways in which the housewife can become a scientific buyer.

A knowledge of the properties of food goes a long way, not only toward lessening the expenditure for food, but in ensuring safety in the substitution of a cheaper for a more expensive food. Honey can be used in place of sugar, as can also molasses, sorghum (home-made or commercial), and maple, cane and corn syrups. Dates, prunes, figs and raisins as dessert or in cooking furnish sugar. Let the farm and town woman plan ahead and raise a variety of food materials that she may not be a slave to high prices, as is the case with many women living in the city. The backyard garden or flock of hens is often a valuable food asset.

Waste.—This must be watched in every home.

Here are a few leaks:

1. Wastefulness due to false pride in a lavish table.

2. Thrift in food means providing enough food, neither "too little nor too much." "Do not be ashamed to plan closely."

3. The larder overstocked, with consequent loss due to deterioration. This may end in overeating, which is wasteful of food, and leads to sickness, which means loss of wages and doctor's bills.

4. Non-use of left-overs. The good housewife will have few left-overs. They must be carefully stored to prevent spoilage, *e.g.*, muffins and meat not allowed to dry, nor lettuce to wilt, because food once served is even more expensive than when first bought on account of the labor and fuel put into its preparation.

5. Unseasonable foods. Strawberries and green peas in December and January spell extravagance in most families. When a food goes up in price, seek a substitute. Do not entirely taboo fresh green vegetables during the winter months. Improved methods of transportation make it possible for the family of moderate means to have the much-needed lettuce (with its fat-soluble vitamine) when the snow is flying.

6. The purchase of expensive cuts of meat and the trimmings, fat and bone, left at the market.

7. Plate waste due to serving more than an individual will eat. Encourage the "clean plate."

8. Waste due to poor cooking.

9. Buying in small quantities and package goods.

In conclusion we may say banish from the table unnecessary foods and elaborate courses. Make a study of the needs of the body, and select the foods to satisfy those needs instead of catering to an artificial appetite. Fresh air and exercise will encourage an appetite that does not require expensive food for its satisfaction.

If these few principles are followed, the family food bill will be materially reduced.

The Budget for Food.—The amount allowed for all food material, including groceries, meats, fish, dairy products, and also ice, need not be much more than ten dollars per month per person, or fifteen dollars as a maximum. This will satisfy every body need and every normal appetite. Following is a typical expense account

for food material for a family averaging three persons a month in 1916:

No. of Persons	Month	Groceries and Ice	Meat and Fish	Milk and Cream	Total
2	January	$13.25	$5.31	$2.59	$21.15
3	February	27.74	8.12	1.62	37.48
2	March	14.04	5.04	2.58	21.66
3	April	23.45	4.81	2.42	30.68
2	May	21.04	1.54	2.48	25.06
4	June	35.62	2.86	2.16	40.64
4	July	31.88	3.18	2.48	37.54
3	August	33.20	4.16	2.79	40.15
4	September	30.03	6.56	2.70	39.29
3	October	25.50	4.50	2.48	32.48
3	November	28.15	5.15	2.70	36.00
3	December	30.56	5.25	2.79	38.60
	Total	$314.46	$56.48	$29.79	$400.73

Average per month for an average of three persons, $33.39.

This account does not represent a standard, because of the variation in the number in the family. In some of the months where two or three are counted for a few days at a time, one or two other persons were present. The head of the family was away from home part of the time.

In the city, food may cost more in the summer months because of the purchase of fresh vegetables and fruits not available in the winter seasons.

It is only by understanding the values of food that one can buy wisely and by making and keeping a monthly account of food expenditures that one is enabled to know definitely the proper proportion to allow for each food group.

The cost of food per capita per day has gradually crept up, but even now with great care in planning the marketing and in preparing the meals it can be kept down to 30 cents per person as a minimum, counting children and adults together and multiplying this factor by the number in the family for family costs. This is a little less than the ten dollars a month just given. Other similar per capita costs are mentioned below.

Suggested Ranges for the Cost of Raw Food Material:

30 cents per day per capita, minimum.

45 cents per day per capita, comfortable.

60 cents per day per capita allows for variety and some delicacies.

75 cents per day per capita allows for the selection of the choicest cuts, some fruits out of season and other luxuries.

90 cents–$1 per day per capita is the maximum and should be carefully scrutinized, for it suggests waste.

For a family of four or five, on ten dollars a week for food, the following allotment has been suggested:

$2.50 for grain foods	$2.00 for fruits and vegetables
2.00 for milk	1.50 for fats, sugar and miscellaneous
2.00 for meat, eggs, fish	

In the May 15, 1918, issue of the *Massachusetts Food Administration Bulletin* the following amounts of food for a reasonable diet were given:

I

The following table shows satisfactory quantities of food as purchased per day for a man at moderate work:

	Richer and More Expensive Diet	Plain and Cheaper Diet
Vegetables and fruits	From 2½ lbs.	Down to 1½ lbs.
Milk	8 oz.	8 oz.
Meats, eggs, cheese, etc.[5]	From 14 oz.	Down to 6 oz.
Cereals	From 8 oz.	Up to 16 oz.
Sweets	From 3 oz.	Down to 1½ oz.
Fats	From 3 oz.	Down to 1½ oz.

Four-fifths of these amounts is sufficient for a moderately active woman; three and one-third times the amount is a reasonable quantity for a family consisting of a moderately active man and woman and three children from 3 to 12 years old.

II

Another way of estimating a reasonable diet is by cost. The following recommendations are made for expenditure for low cost diets:

1. Spend from one-fourth to one-third of your food money for bread, cereals, macaroni, and rice.

2. Buy at least from one-third to one-half a quart of milk a day for each member of the family.

3. Spend as much for vegetables and fruits together as you do for milk. If you use one-half a quart of milk for each member of the family, this may not always be possible. Then spend as much for vegetables and fruit as one-third of a quart of milk a day would cost.

4. Spend not more for meat and eggs than for vegetables and fruits. Meat and eggs may be decreased with less harm than any of the other foods mentioned. The amount spent for meat may decrease as the amount spent for milk increases.

[5] Use two ounces less for every additional half pint of milk.

III

Still another statement has been made as follows, for a family neither poor nor rich, consisting of three adults and four growing children:

	Per Cent. of Total Cost of Food
Meats, poultry and fish	10–15
Eggs	5–7
Milk	25–30
Cheese	2–3
Butter and other fats	10–12
Bread, cereals, and other grain products	12–15
Sugar, molasses and syrups	About 3
Vegetables and fruits	15–18

The Value of Quick Lunch Portions.—The following table adapted from one compiled by Gephart & Lusk, and given in Fisher & Fisk's "How to Live" (reproduced here through the courtesy of Funk & Wagnalls Company, publishers, 1916), gives the calorie value and price of one order of the articles listed as served in the average quick lunch restaurant. While prices have advanced, relative food values are probably about as before the war, except as "portions" have been reduced:

Names of Foods	No. of calories in one order	Cost of one order, "quick lunch" restaurant
Napoleon	418.6	$0.05
Crullers	416.6	.05
Cabinet pudding and vanilla sauce	416.6	.05
Cocoanut pie	357	05
Roast beef sandwich with roll	357	.05
Bath buns	357	.05
Bread custard pudding	357	.05
Pineapple pie	357	.05
Corn muffins	357	.05
Apple pie	357	.05
New England pudding with vanilla sauce	312.5	.05
Chocolate spiced cakes	312.5	.05
Walnut layer cake with marshmallow icing	312.5	.05
Milk crackers	312.5	.05
Bread pudding with vanilla sauce	312.5	.05
Pumpkin pie	312.5	.05
Lamb croquettes and mashed potatoes	833.3	.15
Coffee cake	277.7	.05
Rhubarb pie	277.7	.05
German meat cakes and French fried potatoes	833.3	.15
Old-fashioned molasses cake	277.7	.05
Lemon pie	277.7	.05
Vienna roast with French fried potatoes	833.3	.15
Butter cakes	277.7	.05

Names of Foods	No. of calories in one order	Cost of one order "quick lunch" restaurant
Minced ham sandwich	277.7	.05
Pork and Boston beans	833.3	.15
Cornmeal cakes with maple cane sirup	500.0	.10
Ham croquettes	500.0	.10
Cold rice pudding	277.7	.05
Ham sandwich with roll	250.0	.05
Banana layer cake	250.0	.05
Creamed chipped beef on toast	833.3	.15
Cocoa	250.0	.05
Roast beef cutlet with tomato sauce	833.3	.15
German meat cakes with lyonnaise potatoes	833.3	.15
Swiss cheese sandwich	250.0	.05
Boston baked beans	500.0	.10
Vienna roast, spaghetti and potatoes	625.0	.15
Chocolate cornstarch with cream	227.2	.05
Wheat cakes with maple cane sirup	500.0	.10
Milk crackers and milk	500.0	.10
American cheese sandwich	227.2	.05
New York baked beans	500.0	.10
Hot cornbread	416.6	.10

Food Conservation.—The conservation of food material in the home, through the avoidance of waste, economizing in the preparation and serving of foods, are two factors especially emphasized by the U. S. Food Administration. Restaurants and dining-car managers have been urged to reduce the size of the food portions served, so as to reduce wastage, and of course effect a corresponding reduction in prices on the menus.

The garden movement has already been mentioned, but during the years 1917–1918 it assumed great national importance. Every family has been urged to have its own garden, and where space was not obtainable in the backyard, many cities have, at public expense, prepared vacant lots so that such householders might avail themselves of the opportunity of having a garden. A few hens will often lessen the meat bills; pigs will eat the unavoidable table scraps and then themselves furnish food.

Many organizations have fostered Canning Clubs as one method of reducing the cost of living. A study of substitution, *i.e.*, equally valuable but less expensive foods for those that are costly or unavailable for overseas, is another problem with which the public has been confronted.

Greater production and a greater conservation of food materials combined with better methods of distribution and the municipal, state or governmental supervision of storage warehouses, prod-

hanges and price-fixing, represent the problems that must be ed in the reduction of food prices.

The following text was published in the form of a card by the S. Food Administration for distribution to the general public, h the idea of having it hung on the walls of every kitchen. The ject matter is well worth the study of every housewife:

WIN THE WAR BY GIVING YOUR OWN DAILY SERVICE!

Save the Wheat.—One wheatless meal a day. Use corn, oat- al, rye, or barley bread and non-wheat breakfast foods. Order ad twenty-four hours in advance so your baker will not bake ond his needs. Cut the loaf on the table and only as required. e stale bread for cooking, toast, etc. Eat less cake and pastry.

Our wheat harvest is far below normal. If each person weekly es one pound of wheat flour, that means 150,000,000 more bushels wheat for the allies to mix in their bread. This will help them save democracy. how's zat?

Save the Meat.—Beef, mutton, or pork not more than once a y. Use freely vegetables and fish. At the meat meal serve aller portions, and stews instead of steaks. Make made dishes all left-overs. Do this and there will be meat enough for every e at a reasonable price.

We are to-day killing the dairy cows and female calves as the ult of high prices. Therefore eat less and no young meat. If save an ounce of meat each day per person we will have additional pply equal to 2,200,000 cattle.

Save the Milk.—The children must have milk. Use buttermilk d sour milk for cooking and making cottage cheese. Use less eam.

Save the Fats.—We are the world's greatest fat wasters. Fat food. Butter is essential for the growth and health of children. e butter on the table as usual but not in cooking. Other fats are good. Reduce use of fried foods. Soap contains fats. Do not ste it. Make your own washing soap at home out of saved fats. e one-third ounce less per day of animal fat and 375,000 tons will saved yearly.

Save the Sugar.—Sugar is scarcer. We have used three times much a person as our allies. So there may be enough for all at asonable price; use less candy and sweet drinks. Do not stint gar in putting up fruits and jams. They will save butter.

If every one in America saves one ounce of sugar daily it means 100,000 tons for the year.

Save the Fuel.—Coal comes from a distance and our railways are overburdened hauling war material. Help relieve them by burning fewer fires. Use wood when you can get it.

Use Perishable Foods.—Fruits and vegetables we have in abundance. As a nation we eat too little green stuffs. Double their use and improve your health. Store potatoes and other roots properly and they will keep. Begin now to can or dry all surplus garden products.

Use Local Supplies.—Patronize your local producer. Distance means money. Buy perishable food from the neighborhood nearest you and thus save.

GENERAL HINTS

Buy less, serve smaller portions.

Preach the "gospel of the clean plate."

Don't eat a fourth meal.

Don't limit the plain food of growing children.

Watch out for the wastes in the community.

Full garbage pails in America mean empty dinner pails in America and Europe.

The more fortunate of our people will avoid waste and eat no more than they need; the high cost of living problem of the less fortunate will be solved.

QUESTIONS

1. What are the principal methods that one may adopt to reduce the cost of the food supply without diminishing the quality?
2. Are we always justified in asking for the "very best"? What constitutes the very best?
3. Are we ever justified in paying exorbitant prices for certain foods if they cannot be had for less? What would be the remedy in such cases?
4. Give illustrations of how most people waste money in the selection of food.
5. Name foods from both the animal and vegetable kingdoms, which are rich in fats.
6. Give the chief sources of fat-soluble A. What is its function?
7. What is the function of the proteins? Give their sources. When may they be extravagantly used?
8. Why is fruit especially needed in the diet?
9. Name the least expensive fruits and vegetables found on the market in the Fall? Spring? Summer? Winter?
10. What are good substitutes for meat?
11. What is meant by a "balanced ration"?
12. What is the function of the carbohydrates? Give their chief sources?
13. What is the danger from diet largely made up of the seeds of plants?

Gastronomy

PROBLEMS AND DEMONSTRATIONS

1. Ascertain how much it is costing your family, per person, per month, for food, including ice.
2. Make a budget for one month's food supply for a family of three adults; for five; for seven. Divide this budget into three subdivisions, embracing separately Groceries and Ice; Meat and Fish; Milk and Cream.
3. Ascertain how much more than is necessary is being spent by your family for table supplies.
4. Make a list of the current prices for the following items: Sugar; flour per 50 lbs.; potatoes; apples; eggs; butter; canned tomatoes; peas and corn. Compare earlier prices.
5. Compare your family bill for meat with that for groceries. Do you think that the amounts are properly proportioned?
6. Ascertain if possible if anything could be saved through ordering food items by parcel post direct from the farm.
7. If in 1916 the price of bacon was 30 cents a pound and in 1917 40 cents, what was the per cent. of increase in the price?
8. Calculate the calorie content for menu number III, page 201. How many calories would be left for the other two meals eaten on the same day? Give total calories you would allow for the other two meals.
9. Can you give a menu that you have seen served, which had an excess of fat? Of carbohydrates?

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CHAPTER XVIII

FOOD MARKETING

ONE phase of home study and planning that has been neglected by the average housewife, is the preparation that foodstuffs undergo for market and the purchase of food materials. Recently the Government, as well as many private investigators, has devoted considerable study to methods of distribution, especially to the more economic organization of wholesale markets in cities, and the possible direct connection by parcel post of the producer and the consumer. Some agitation pertaining to the delivery of purchases on the part of tradesmen is now in evidence, but the fundamental principles underlying the production and preparation of our food supply have been neglected.

Production.—The ultimate source of production of practically all that we subsist upon is the farmer and stock-grower. Strictly speaking, the farmer represents plant production, while the stock-grower may more typically represent animal production and animal products, such as milk, butter, cheese, etc.

The dealer, jobber or wholesaler who makes his living through the sale of food products becomes more or less a student of agricultural economics. To be successful he must know the sources of supply, such as the great wheat-producing areas of the world and the enterprises engaged in the preparation of food products for market. He knows just which states we can depend upon for corn and other cereals. The truck-gardens and the fruit areas of America are to him an open map. The same is true of the animal industry.

This information, however, is not sufficient. He must be familiar with normal and abnormal climatic conditions and with the normal and abnormal economic conditions that are liable to affect the total production or consumption of food products. Further, he must know the processes involved in their preparation for market and in their transportation to the food centres of the country. If food products must undergo a process of preparation, he knows and can trace the route that they take from the farm or ranch to the factory, cannery or stock-yards. All the factors that enter into the distribution of the finished product form for him an open book.

Men engaged in this business study the daily market reports the newspapers, as well as the weather reports, and they often d out special investigators to ascertain crop conditions. Every or that enters into the question of supply, demand and price is lied with the minutest detail.

While it is not necessary for the housewife to cover all these ils, such a study should not be entirely neglected in the home. application of this statement will be made in this chapter.

Preparation of Foodstuffs.—Few articles of food reach the ket without undergoing some form of preparation, with the ption of fresh fruits and vegetables and perhaps fish and eggs. The cereals are first made into flours and meal or subjected ther processes. Vegetables, fruits, fish and meat products form basis of the canning industry. Sugar is a manufactured food duct, as are butter and cheese. Eggs are candled, and even undergoes a preparation for market. All the functions of the her and packer are represented in our meat supply. Added to these processes are the problems of cold storage.

Distribution.—The raw product must first be shipped from farm or ranch. Wheat and other cereals go to the miller. tle go to the butcher, to the packer, and, like other perishable ducts, to the cold storage warehouse. This represents the first of transportation, for which the farmer and ranchman gener- pay. The miller and the packer add their profit to the cost of paration.

Jobbers or wholesalers are the principal customers of the miller, packer and the canner. They send out their salesmen to the large smaller retail dealers, adding to the cost of the finished product r cost of doing business, together with their profit.

The retailer now offers the finished product to the public. His of doing business, which includes rent, heat and light; taxes insurance; freight, express and drayage; clerk hire; paper, ng, general supplies and delivery to customers, must, with his it, be added to the price charged him by the jobber. The fixed rges of the grocer, or the cost of doing business, cannot be much than 20 per cent. This does not include his profit. Fixed rges are included in items listed as cost of doing business. The tors, then, that make the ultimate price paid by the consumer foodstuffs include the following:

1. *Producer:* (Farmer and Ranchman, etc.)
   (*a*) *Price* paid for the raw product.
2. *Manufacturer:* (Miller, Packer, Canner, etc.)
   (*b*) *Transportation* from producer, if paid by the manufacturer, which is sometimes the case.
   (*c*) *Cost* of fabrication or manufacture in preparation of raw material for market.
   (*d*) *Profit* of manufacturer.
3. *Jobber and Wholesaler:*
   (*e*) *Transportation* from the manufacturer to jobber.
   (*f*) *Cost* of doing business—selling to retailers.
   (*g*) *Profit.*
4. *Retailer:*
   (*h*) *Transportation* from jobber or wholesaler.
   (*i*) *Cost* of doing business of retailer.
   (*j*) *Profit* of retailer.
5. *Ultimate Consumer:*
   (*k*) Sum of all the above charges, which forms the retail price of commodities.

A summary of the above shows that the retail price paid by the consumer represents the following charges:

Four "Cost of Production" charges. *Three* "Transportation" charges. *Four* "Profits."

The ultimate consumer usually pays a transportation charge in the form of delivery service from the retailer, which the latter charges up under "cost of doing business," so that in reality there are four transportation charges to be paid.

Some of the factors that enter into the cost of doing business by the jobber and the retailer should be studied by the consumer.

Cost of Doing Business: (Jobber and Retailer.)
This charge includes the following items:

1. Rent.
2. Insurance and taxes.
3. Salaries—Officials and owners.
4. Transportation, including drayage.
5. Interest on investment.
6. Interest on debts and accounts.
7. Depreciation and loss on stock.
8. Packing—boxes, barrels, crates, paper and twine.
9. Cost of collecting.
10. Cost of deliveries.
11. General overhead. (Miscellaneous expenses not included above.)
12. The cost of traveling salesmen and clerks may be added; and the cost of maintaining "charge accounts" also, which are a part of the cost of distribution.[1]
13. Bad accounts.

[1] In this connection, should be studied such plans as "Self-Service," "Groceries," "Automats," "Cash and Carry," etc.

Of course to all these items of expense must be added the original
of the goods and the jobbers' and retailers' profits.

Some of the Factors That Affect Prices.—Prices of food-
ffs, like the prices of all commodities, tend to change in accord-
e with changes in the value of money which is the measurer
ll values—if money becomes dearer, as in the decades preceding
6, prices of all commodities tend to drop; if money becomes
aper, as in the 20 years since 1897, then the prices of all com-
dities become higher. We are living in a time when the prices
ll things, including foodstuffs, are increasing. Food prices are,
ddition, influenced by the many special conditions affecting the
ply and demand for foodstuffs, such as changes in the methods of
iculture; shifts of population from country to city; transporta-
n changes; marketing facilities, etc., some of which are particu-
ly interesting as they are subject to possible control by individual
state action. Anything which increase the *supply* of foods, or
luces the cost of producing them, will bring down prices; and
ything that increases the *demand* for foods, or raises the cost of
oducing them, will make prices higher. The world war has
ought many special factors into play upon both the supply and
e demand conditions in food markets. The war has brought
emarkable attempts to affect food prices by government action
hich is intended to stimulate production and direct consumption.

rices:

Prices of foodstuffs are affected by various factors, a few of which are
ntioned:

1. *Climatic conditions*, increasing or reducing total production.
2. *Agricultural conditions*, increasing or reducing total production. This
udes the ravages of insect pests, plant diseases, shortage of labor for
work, and decreasing acreage.
Economic conditions:
(*a*) *Transportation*,–
Inability to secure proper transportation.
(*b*) *Markets*,–
Poor roads and inaccessibility to markets.
(*c*) *Manufacturing*,–
Unusual conditions involved in manufacturing, such as shortage of labor, wages, and the cost of material necessary to packing and canning.
(*d*) *Foreign Conditions*,–
Supply and demand in foreign countries competing with us in the same commodity. A failure of the South American wheat crop, for instance, would affect prices of wheat and flour in this country.

(*e*) *War,*–
War, whether in this country or in foreign countries, creates a unusual demand upon the foodstuffs of this country. Production in the countries at war is necessarily decreased, while great armies must be provisioned.

(*f*) *Storage,*–
The holding of great quantities of supplies in storage indefinitely, awaiting increased demands.

(*g*) *Produce Exchages,*–
Exchanges, that endeavor to fix prices the country over, no matter how beneficial they may be to producers and jobbers, or how legal may be their action, tend to raise prices to consumers, by the amount of the cost of their services and profits. This may perhaps be counterbalanced, in part, by the effect they have in stabilizing prices over periods of time; this to the man on wages, small salary, or other uniform income, is an advantage.

(*h*) *Food Speculators,*–
Aside from those represented by legitimate Produce Exchanges, and storage warehouses, the professional speculators, who attempt to corner markets, add a very heavy burden to the consumer's already heavy toll.

(*i*) *Population,*–
An increasing population brings more demands, and if the supply does not increase equal to these new demands, prices must go up.

(*j*) *Unusual Conditions,*–
There are many unusual and unforeseen conditions that affect prices, other than those already mentioned. The sudden increased demand for a little-used product might be an illustration.

(*k*) *Higher Standards of Living,*–
Higher standards of living usually result in great wastage. Material once thought good enough for any table is now often discarded, if not entirely disregarded in marketing. Out of season products; higher priced articles than the usual run; selected materials; the demand for "package goods" rather than the same or better quality in bulk; and other factors that enter into the cost of "high living" make it easy for the food speculators to flourish and indirectly add to the price of other commodities.

(*l*) *Undeveloped Distribution,*–
Lack of some practical method of delivering the raw or manufactured material from the producer or manufacturer to the consumer which will eliminate the so-called middleman or jobber, and to a certain extent the retailer.

These are the more important factors that enter into the cost of foodstuffs, and knowing them the housewife should study the problem in order to see what items of expense she may circumvent. A few suggestions will be given as possible means for reducing the cost of foods to the consumer.

The Study of Markets.—Every one should be thoroughly famil-

ar with the world's sources of supply, as a matter of information, f nothing else. One cannot shop intelligently, or to the best advan- tage, if one does not know the sources of our food supply, as well as the conditions liable to affect that supply. Why wheat is mar- keted in sacks in the West, and in barrels in the East, may not directly help us to purchase to the best advantage, but a general knowledge of even such seemingly irrelevant facts will prove factors in the final solution of problems of food supply. Before the con- sumer can curb the abuses of the producer, the manufacturer, the jobber or the retailer, if abuses exist, the consumer must under- stand the problems and conditions that confront these distributors.

Buying Direct.—In any practical method of dealing directly with the producer, packer or canner, the public must first find where they are located.

The writer has often witnessed potatoes and fruits selling at exorbitant prices in the Chicago retail market, when they were rot- ting on the ground in Wisconsin and Michigan. On the other hand, butter and cheese sell for as much, if not more, in the towns of Wisconsin and Illinois—two of the great dairy areas of the country —than they are selling for in Chicago. The advertisements of farmers, offering to send butter, eggs and cheese by parcel post to the consumer, generally carry a price that is equal to the highest Chicago retail price for the highest grades of produce. Why is this so? These are questions every consumer should try to answer.

If there is a practical method of buying direct, every housewife, or a group of families, should endeavor to locate the nearest vege- table and fruit canneries, creameries and cheese factories. A list of trustworthy farmers, who may be depended upon, should be secured. In this work the Government is glad to help, having issued for several cities, a list of farmers prepared to deliver by parcel post. A sufficient number of families might organize and coöperate, even to the extent of sending a representative to spy out the land and locate these producers. A carload of potatoes could be ordered at a time, canned goods bought by the case, and butter and eggs in large quantities could be purchased and divided among the coöperators. Even individual families may do this on a smaller scale. Many can- neries will agree to sell one or more cases of canned vegetables and fruits to an individual. One reason why such plans have not been worked out is because we are too indifferent to the seemingly small profits involved.

Institutions such as large hospitals, jobbers and many retail have access in advance to information showing market conditio and their buyers are constantly studying the daily market repor When conditions indicate a coming shortage in supply on a risi market, they purchase on the most favorable conditions. T housewife should do the same thing.

If a family is able to buy in quantities, this is the first thi to do. Study the daily reports in the papers of the prices of fo products. Take advantage of warnings of coming shortages and al of low prices, and lay in a supply of canned and package goods f future contingencies. If "direct from the farm" marketing being attempted, a knowledge of wholesale prices will help one purchase to the best advantage.

Storage Facilities.—Another reason why direct buying in qua tities is not practical for everyone at present, is the fact that t modern apartment is not provided with a cellar suited for t storage of perishable articles. Tenants should demand, and t law should compel all apartment owners to provide, storage room which an even temperature may be maintained. Some of the new apartments are building these rooms. A brick wall instead a frame partition, and the absence of heating pipes, is all th is necessary.

Parcel Post Marketing.—A detailed study of this proble should be made by every housekeeper. The parcel post rate is bas upon distances, or areas called zones, and upon the weight of t package to be mailed. Packages of varying weights may be mai within one zone at a rate fixed by the weight and the area of th zone. Maps showing these zones may be obtained from any s tioner, and full details and amounts of postage may be had fr the local post-office. There are eight zones fixed by the post-off department. Seventy pounds may be sent within the first and s ond, or two nearest zones, and fifty pounds to the other and mo distant zones.

Express Service.—Some express companies have offered spec services in connection with "direct to the consumer buying." T express companies have been compelled to compete with the po office service, and in some ways they are in a position to render assistance not available through the parcel post. Every consum should write to the Government, and also to the various expr companies (now federated for the period of the war), asking information in regard to these two types of service.

Neighborhood Marketing Clubs.—Perhaps one of the best ways to make marketing by parcel post practical is through the formation of neighborhood marketing clubs. If the family of a traveling salesman is represented in the club let him, in his travels through small towns, find out the farmers who are willing to contract for the delivery of several barrels of apples or several bushels of potatoes, of eggs and vegetables. Cash payment, freight shipments, and the division of the expenses among a few families even, will do much to lower the cost of living. The Government has issued directions about containers and methods of transportation.

Market Deliveries.—A serious attempt is now being made by many retailers to charge for each delivery. Some impose a charge of five cents for each single delivery. The delivery system has been abused, but it seems to be a necessary economic factor that should not be entirely eliminated. In some places, collective deliveries have been instituted, one concern delivering for all merchants. In other places, especially in the smaller cities, city markets have been instituted. Dayton, Ohio, is a splendid illustration of this plan: on market days farmers have their stalls on one of the principal streets, with their wagons backed up to the street curb; here the individual housewife comes, unabashed, market-basket upon her arm, to make her purchases. Undoubtedly such a system contributes to lowering costs.

Public opinion must be aroused over the almost prohibitive cost of necessities, and every available source of supply and every means of economy in distribution should be canvassed. Organized clubs and societies should take the matter in hand in connection with their own towns.

Other Factors Contributing to the High Cost of Living.—The delicatessen is a menace to the American home. More money is wasted in one day's purchase in a delicatessen, by the regular patron of such a place, than can be saved in a week by the frugal housewife. The purchase of cooked foods, for the normal household, except in emergency, is usually uneconomical.

Our standards of living must be lowered. We must "eat to live" but not "live to eat"; we must learn to serve the simplest meal artistically, not to provide an elaborate feast. We must learn to eliminate the foods we do not actually need, and base the amounts upon actual body needs and conditions. We must learn to say "No" when the grocer says "sixty-cent butter; fifty-cent eggs; and

eighty-cents-a-peck potatoes." We must find substitutes, of equally nourishing qualities, for high-priced foods.

Summary.—Let us sum up some of the factors that might reduce the price of foodstuffs.

1. Purchasing direct from the producer.
2. Purchasing in quantities.
   This presupposes a knowledge of the following:
   (*a*) Conditions of production.
   (*b*) The processes of preparation.
   (*c*) The place of production or preparation.
   (*d*) Transportation problems.
   (*e*) Methods of distribution.
   (*f*) Also No. 3.
3. Providing for proper storage facilities.
4. Elimination of deliveries.
5. City public markets.
6. Elimination of the delicatessen.
7. Lower the standard of living to a reasonable basis.
8. A daily study of market reports or prices.

Organization.—Every Woman's Club should appoint a committee to study these problems, and every public-school class in home economics should investigate them, in terms of the local community. The retailer should be invited to state his problems and an attempt to coöperate with him should be made, if possible. If not, cooperative clubs should be formed. Send to wholesalers for information pertaining to the products of canneries and prices.

At present it is impossible to point out a solution of the problem of the high cost of living, but that does not justify us in refusing to study the problem in all of its details.

During the war the Government will be endeavoring to advance these problems toward a solution. The best method of solving them is by experimentation, and the best way of bringing about such experiments is by the diffusion of knowledge pertaining to every phase of the food problem. The U. S. Department of Agriculture and the U. S. Food Administration at Washington, and the State Agricultural College are centres of information on these subjects for citizens of every section.

QUESTIONS AND PROBLEMS

1. Name the source of our raw food supplies.
2. How many transportation charges may be added to the cost of food products from the time they leave the farm until they reach the consumer? Name them.
3. How many profits are added? Name them.

4. If possible, visit the nearest cannery or creamery and write a paper describing the processes.
5. Ascertain the name of one or more grocery jobbers in your town or in the nearest large city.
6. Name some of the items that make up the cost of doing business for the jobber and the retailer. What are the functions of each?
7. What is meant by the term "middleman"? What is a Produce Exchange?
8. Suggest as many ways as possible for reducing the cost of table supplies.
9. Secure a clipping from the nearest daily paper showing the market reports of foodstuffs; write out the abbreviations and terms used in this report, with which you are not familiar, and learn their meanings.
10. Ascertain the retail price of canned beans, tomatoes, peas, three fruits, laundry soap, kerosene and paper towels; ascertain how these are sold in quantity, and how much you would have to pay for such a quantity from a wholesaler or jobber.
11. Secure from an Express Company any information, or printed matter it will give you regarding its service for purching direct from farmers. Write to the Government for similar information.
12. Name articles of food served on your own table which could be dispensed with without loss to the body or which could be bought at a saving.
13. Ask your local tradesmen if they would be willing to give a discount for purchases carried home by the customer; a discount for cash.
14. What prevents the Parcels Post System from being a greater success in reducing the cost of food?

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CHAPTER XIX

WEIGHTS AND MEASURES

THE Federal Government has a department of weights and measures, known as the U. S. Bureau of Standards, at Washington D. C. Here are kept the standard yard, bushel, pound, etc., and with these all weights and measures may be compared for correction. Standard and official time is determined by master clocks which in turn are corrected by astronomical observations, and with the aid of electricity, clocks in various cities may be kept in unison, or rather synchronized according to differences in longitude.

At the capital in many, if not in all states, is a similar department in which are kept standard and official weights and measures based upon those in the Bureau of Standards at Washington. Each state legally determines for itself what shall constitute a given measure or weight and the standards of the Federal government are taken as a basis.

Each state also specifies how many pounds of certain articles shall be considered a bushel, and fixes regulations governing the selling of articles by weight or by measure. The municipal government of the larger cities in turn has a similar bureau in charge of an official sometimes called the *city sealer*, because he is given power to inspect weights and measures, to attach his seal to weights and measures, and to confiscate them if they are found faulty. The city council of cities also usually establishes rules for the selling of products by weight and measure, but all such measures are subject to the law of the state in case of conflict.

Complaints as to Weights and Measures.—Customers' complaints as to false weights and measures should be made to the local municipal or county official in charge of weights and measures. Consumers will find it desirable to have scales and measures at home to check purchases. These can if desired be sealed by the public official.

Statutory Weights of the Bushel.—For reference purposes, the statutory weights of the bushel in the various states are appended as an illustration of the foregoing paragraph (table on pp. 224–225).

It will be noticed that the articles listed consist principally

the cereals, fruits and vegetables. Other articles are listed a single state, that of Illinois, in the following tabulation:

STANDARD WEIGHTS PER BUSHEL AND QUART IN ILLINOIS

	Bushel, Lbs.	Quart, Lbs.	Quart, Ozs.
Alfalfa Seed	60	1	14
Apples, green	50	1	9
Apples, dried	24		12
Barley	48	1	8
Beans, green or string	24		12
Beans, wax	24		12
Beans, white	60	1	14
Beans, castor	46	1	7
Beets	60	1	14
Blue grass seed	14		7
Bran	20		10
Buckwheat	52	1	10
Carrots	50	1	9
Charcoal	20		10
Clover seed	60	1	14
Coal	80	2	8
Coke	40	1	4
Corn seed, broom	48	1	8
Corn meal, unbolted	48	1	8
Corn, in the ear	70	2	3
Corn, Kaffir	56	1	12
Corn, shelled	56	1	12
Cotton seed	32	1	
Cranberries	33	1	½
Cucumbers	48	1	8
Flax seed	56	1	12
Gooseberries	40	1	4
Hair, plastering, unwashed	8		
Hair, plastering, washed	4		
Hemp seed	44	1	6
Hickory nuts	50	1	9
Hungarian grass seed	50	1	9
Indian corn or maize	56	1	12
Lime	80	2	8
Malt	38	1	3
Millet	50	1	9
Millet, Japanese barnyard	35	1	1½
Oats	32	1	..
Onions	57	1	12½
Onion sets, top	30		15
Onion sets, bottom	32	1	
Orchard grass seed	14		7
Osage orange seed	33	1	½
Parsnips	50	1	9
Peaches	48	1	8
Peaches, dried	33	1	½

	Bushel, Lbs.	Quart, Lbs.	Ozs.
Peanuts, green	22		11
Peanuts, roasted	20		10
Pears	58	1	13
Peas, dried	60	1	14
Peas, green in pod	32	1	
Popcorn, in the ear	70	2	3
Popcorn, shelled	56	1	12
Potatoes, Irish	60	1	14
Potatoes, sweet	50	1	9
Quinces	48	1	8
Rape seed	50	1	9
Red top seed	14		7
Rough rice	45	1	6½
Rutabagas	50	1	9
Rye meal	50	1	9
Rye	56	1	12
Salt, coarse	55	1	11½
Salt, fine	50	1	9
Shorts	20		10
Sorghum seed	50	1	9
Spelt	40	1	4
Spinach	12		6
Sweet clover seed, unhulled	33	1	½
Timothy seed	45	1	6½
Tomatoes	56	1	12
Turnips	55	1	11½
Walnuts	50	1	9
Wheat	60	1	14

	Lbs.
Wheat Flour, per barrel	196
Wheat Flour, per half barrel	98
Wheat Flour, per quarter-barrel sack	49
Wheat Flour, per eighth-barrel sack	24½
Cornmeal, per bushel sack	48
Cornmeal, per half-bushel sack	24
Cornmeal, per quarter-bushel sack	12

The important articles in this list may be compared with the standard weights in the state in which the student lives; information on state laws regarding weights can be secured from the State Secretary at the State Capitol.

As it would be impractical to give the law of each state or large city governing the sale of commodities, a few principal features pertaining to important commodities is given from the Chicago ordinances governing the Department of Weights and Measures. The student and housewife should become familiar with the law of the state or the ordinances of the city in which he or she lives in so far as they affect the commodities which she handles.

Bread.—Bread must be made in clean and sanitary places, sub- to inspection of the city officials, and it must not contain any eterious substances.

A pound loaf, avoirdupois, is the standard, and loaves must weigh pound, one-half, three-quarters, double, triple, quadruple, quin- le or sextuple loaves, and in no other way.

Every loaf shall have affixed to it a label, 1 in. sq. or 1 in. in meter, which shall bear in black ink letters or figures upon white er, the weight of the loaf and the business name and address of maker, baker or manufacturer.

Everyone offering bread for sale must keep on hand suitable les and weights in a conspicuous place, and shall weigh the bread the presence of the purchaser if requested to do so by the latter.

There has been much discussion regarding the wisdom of ng a legal price for standard sizes or weights of bread, but the ncipal argument against this policy is the fact that the market ces of raw materials as well as for labor fluctuate, and a legally ed price may mean a great loss to the baker.

Fuel.—The driver or delivery man must be supplied with a ket, bearing the name of the seller of the fuel to be delivered, ich ticket shall also show the net weight of the fuel, and the name d address of the purchaser to whom the ticket must be delivered, the time of the delivery of the fuel. Fuel must be sold by oirdupois weight unless otherwise provided for by contract; this, wever, does not include firewood.

If the purchaser demands that the weight specified on the ticket verified, the seller or his agent must reweigh the same upon a ale designated by the city inspector of weights and measures, or on a scale agreed upon by purchaser and seller.

Firewood shall measure 128 cubic feet to the cord, and the driver nall deliver to the purchaser a ticket showing the quantity of fuel elivered.

Milk and Cream.—The cover or cap of every bottle or glass nilk or cream container should bear in indelible letters the name of the individual or concern bottling such milk or cream, and the ottle containing the same must not have blown into it the name f anyone other than the name appearing on the cover or cap as e bottlers of the same; glass containers must also be indelibly and rmanently marked with their exact capacity.

Ice.—Unless specifically agreed upon between seller and buyer,

STATUTORY WEIGHTS OF THE BUSHEL.[1]

State or territory	Wheat	Rye	Oats	Barley	Buckwheat	Shelled corn	Corn on cob	Cornmeal	Bran	Potatoes, Irish	Potatoes, sweet	Carrots	Onions	Turnips	Beets	Beans	Peas	Apples	Dried apples	Dried peaches
United States	60	56	32	48	42	..	..	48	..	60	..	..	..	..	..	..	60	..	..	..
Alabama	60	56	32	47	..	56	70	46	..	60	55	..	..	55	..	60	60	..	24	38
Arizona	60	56	32	45	..	54	..	..	..	..	..	..	..	..	..	60	..	..	..	..
Arkansas	60	56	32	48	52	56	70	48	20	60	50	..	57	57	..	60	60	50	24	33
California	60	54	32	50	40	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colorado	60	56	32	48	52	56	70	50	..	60	..	..	57	..	..	60	..	..	..	..
Connecticut	60	56	32	48	48	56	..	..	20	60	54	50	52	50	60	60	60	48	25	33
Delaware	60	..	..	..	..	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..
District of Columbia	..	..	32	..	..	56	..	..	..	60	..	..	..	..	..	..	..	..	..	..
Florida	60	56	32	48	..	56	70	48	20	60	60	..	56	54	..	60	..	48	24	33
Georgia	60	56	32	47	52	56	70	48	20	60	55	..	57	55	..	60	60	..	24	33
Hawaii	60	56	32	48	..	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Idaho	60	56	36	48	42	56	..	..	..	60	..	..	..	..	..	..	..	45	28	28
Illinois	60	56	32	48	52	56	70	48	20	60	50	50	57	55	60	60	60	50	24	33
Indiana	60	56	32	48	50	56	68	50	..	60	55	..	48	55	..	60	..	..	25	33
Iowa	60	56	32	48	52	56	70	..	20	60	46	..	57	..	..	60	..	48	24	33
Kansas	60	56	32	48	50	56	70	50	20	60	50	..	57	55	..	60	..	48	24	33
Kentucky	60	56	32	47	56	56	70	50	20	60	55	..	57	60	..	60	60	..	24	39
Louisiana	60	56	32	48	..	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maine	60	50	32	48	48	56	..	50	..	60	..	50	52	50	60	60	60	44	..	..
Maryland	..	..	26	..	..	..	..	..	..	56	..	..	..	..	..	..	..	..	..	..
Massachusetts	60	56	32	48	48	56	..	50	20	60	54	50	52	..	..	60	60	48	25	33
Michigan	60	56	32	48	48	56	70	50	..	60	56	..	54	58	..	60	60	48	22	28
Minnesota	60	56	32	48	50	56	70	..	..	60	55	45	52	..	50	60	60	50	28	28
Mississippi	60	56	32	48	48	56	72	48	20	60	60	..	57	55	..	60	60	..	26	33

Missouri	60	56	32	48	52	56	70	50	20	60	56	50	57	42	..	60	60	48	24	33
Montana	60	56	32	48	52	56	70	50	20	60	..	50	57	50	50	60	60	45	..	..
Nebraska	60	56	32	48	52	56	70	50	20	60	50	..	57	55	..	60	60	..	24	33
New Hampshire	60	56	32	..	..	56	..	50	..	60	..	..	..	..	..	62	60	..	..	..
New Jersey	60	56	30	48	50	56	..	..	..	60	54	..	57	..	..	60	60	50	25	33
New York	60	56	32	48	48	56	..	50	20	60	54	50	57	..	..	60	60	48	25	33
North Carolina	60	56	32	48	50	56	..	..	..	..	..	..	..	..	..	..	60	..	..	..
North Dakota	60	56	32	48	42	56	70	..	20	60	46	..	52	60	60	60	60	..	..	..
Ohio	60	56	32	48	50	56	68	..	..	60	50	50	55	60	56	60	60	50	24	33
Oklahoma	60	56	32	48	42	56	70	..	20	60	46	..	52	60	60	60	60	..	..	..
Oregon	60	56	32	46	42	56	..	..	..	60	..	..	..	..	..	..	..	45	28	28
Pennsylvania	60	56	32	47	48	56	..	..	..	56	..	..	50	..	..	..	..	..	..	..
Rhode Island	60	56	32	48	48	56	70	50	20	60	54	50	50	50	50	60	60	48	25	33
South Carolina	..	..	..	..	..	..	..	48	..	..	..	..	..	..	..	..	..	..	..	..
South Dakota	60	56	32	48	42	56	70	..	20	60	46	..	52	60	60	60	60	..	..	..
Tennessee	60	56	32	48	50	56	70	..	20	60	50	50	56	50	50	60	60	50	24	26
Texas	60	56	32	48	42	56	70	..	20	60	55	..	57	55	..	60	..	45	28	28
Vermont	60	56	32	48	48	56	..	..	..	60	..	50	52	60	60	62	60	46	..	..
Virginia	60	56	30	48	52	56	70	50	..	56	56	..	57	55	..	60	60	..	28	40
Washington	60	56	32	48	42	56	..	..	..	60	..	..	..	..	..	..	..	45	28	28
West Virginia	60	56	32	48	52	56	..	..	..	60	..	..	..	..	..	60	..	..	25	33
Wisconsin	60	56	32	48	50	56	70	50	20	60	54	50	57	42	50	60	60	50	25	33

Courtesy of the Chicago Daily News, from the "Chicago Daily News Almanac."

all ice must be sold by avoirdupois weight, and it must be weighed at the time of delivery by the deliveryman, who shall be provided with a steelyard balance for the purpose which has been adjusted and sealed by the inspector of weights and measures.

Meats.—All meats, excepting shanks, offal, heads and pluck, poultry and wild game, shall be sold by weight, and shall be weighed on a scale by weights or a beam, properly sealed.

Scales.—No scale shall be kept or used for weighing any substance or thing for the public, for fee or reward, unless said scale has been inspected by the proper officials and unless the weigher has otherwise complied with the ordinances and has been duly authorized to do so.

Pedlers and hawkers must have their scales annually inspected, adjusted and sealed by the city weigher.

Heaped Measure.—All corn in the ear, potatoes, coal, large fruits, coarse vegetables and all bulky articles sold or offered for sale by dry measure, shall be sold by heaped measure, and all commodities sold by heaped measure shall be duly heaped in said measure in the form of a cone, the top of the outside measure by which the same shall be measured to be the limit of the base of such cone, and such cone to be as high as the nature of the article to be measured will admit the cone to be heaped.

Avoirdupois Net Weight or Numerical Count.—All vegetables, fruits and vegetable products, meats and non-liquid animal products, butter, cheese and dairy products, except fresh berries and small fruits, shall be sold by avoirdupois net weight, or numerical count unless otherwise agreed upon in writing. Seeds, grain, flour, meal and other cereals or cereal products, and also vegetables roots which by common custom are sold by the bunch are not included in this ordinance.

Repacking.—Fresh or green fruit, or vegetables if emptied from and repacked in barrels, boxes, baskets or other receptacles, must show upon the receptacle in a conspicuous place the words "Repacked by," followed by the name of the one repacking such articles.

Fresh Berries and Small Fruits.—In the absence of a special agreement, such fruits must be sold by avoirdupois weight if in bulk, or by numerical count, or in uniform size baskets, boxes or other receptacles, containing one quart or one pint standard dry measure, or multiples thereof, and in no other way, and said receptacles must be uniformly filled.

asures and weights of all kinds are subject to the inspection
official sealer, and penalties are attached to the infraction
and all of the ordinances pertaining to weights and measures.
· reference purposes specifications of the various measures
given:

ıear Measures.—Measures of length may be graduated in
meters, feet or inches with customary subdivisions, provided
ɔthing in this section shall prevent the subdivision of the
's chain into links.

in divisions shall be plainly designated, and the length of
graduations shall be longer than that of the intermediate
sions. Intermediate subdivisions shall be varied in length
ey may be conveniently read.

ıes marking subdivisions shall not be greater in width than
arter of the smallest subdivision, and in no case wider than
h.

graduations must be spaced uniformly and be perpendicular
edge of measure.

asures of length may be made of any material whose form
ıensions remain reasonably permanent under normal con-
; for example, steel, brass, hard wood, etc. Provided, how-
hat tapes for commercial purposes may be made of wire-
cloth.

ɜ ends of wooden measures shall be protected by metal firmly
ɨd to the measures.

ıgth measures shall be smooth and straight.

ınter tacks may be used when diameter of head does not
one-eighth inch.

ɔes which have errors exceeding these following should not be
Length 100 feet, allowable error $^1/_4$ inch, under a tension of
; length 50 feet, allowable error $^3/_{32}$ inch, with tension 10
ngth, 25 feet, allowable error $^1/_4$ inch with tension 10 lbs.;
6 or 3 feet, allowable error $^1/_{32}$ inch with tension of 5 lbs.

all measures of length except tapes the following tolerances
ɜ allowed: 6 feet, tolerance $^3/_{16}$ inch; 3 feet, $^3/_{32}$ inch; 1 foot,
ɔh; 6 inches or less, $^1/_{64}$ inch.

ɥuid Capacity Measures.—Liquid measures must be made
enough to withstand ordinary usage without becoming easily
ed, and should be made of enamel ware, metal, glass or com-
n. Liquid measures must be such that the capacity is deter-

mined by a definite edge at the top of the measure, and gra rings, except those placed to strengthen the measure, will allowed. In a liquid measure having a tap, this tap mu pletely empty the measure without tilting, and when pour is provided the measure must hold its full capacity with contents running into the lip.

The following errors are allowable: 10 gal., tolerance or 9 cu. in.; 5 gal., 3 fl. oz. or 5.4 cu. in.; 1 gal., 4 fl. drams, o in.; 1 quart, 2 fl. drams, or .45 cu. in.; 1 pint, 1.5 fl. drams, or in.; 1 gill, 1.0 fl. drams, or .22 cu. in.

Tables of Weights and Measures.—For reference p the various tables of weights and measures, together wi Metric System, is here appended:

United States Linear Measure

12 inches (in.) = 1 foot (ft.).
3 ft. = 1 yard (yd.) = 36 inches.
5½ yards = 1 rod (rd.) = 16½ feet.
320 rods = 1 mile (mi.) = 1760 yards = 5280 feet.

Square Measure

144 square inches (sq. in.) = 1 square foot (sq. ft.).
9 sq. ft. = 1 square yard (sq. yd.).
30¼ sq. yd. = 1 square rod (sq. rd.).
160 sq. rd. = 1 acre (a.).
640 acres = 1 square mile (sq. mi.).
36 sq. mi. = 1 township (twp.)

Cubic Measure

1728 cubic inches (cu. in.) = 1 cubic foot (cu. ft.).
27 cu. ft = 1 cubic yard (cu. yd.).
128 cu. ft. = 1 cord.
1 gal. contains 231 cu. in.
1 bu. contains 2150.42 cu. in.

United States Liquid Measure

4 gills (gi.) = 1 pint (pt.).
2 pt. = 1 quart (qt.) = 8 gills.
4 qt. = 1 gallon (gal.) = 8 pints = 32 gills.
31½ gals. = 1 barrel (bbl.). = 126 quarts.
2 bbl. = 1 hogshead (hhd.) = 63 gallons = 252 qts.

Apothecaries' Fluid Measure

60 minims (m.) = 1 fluid dram (fl. dr.).
8 fl. dr. = 1 fluid ounce (fl. oz.) = 480 minims.
16 fl. oz. = 1 pint (o.) = 128 fl. dr. = 7680 m.
8 O. = 1 gallon (cong.) = 128 fl. oz. = 1024 fl. dr.

United States Dry Measure

2 pints (pt.) = 1 quart (qt.).
8 qt. = 1 peck (pk.) = 16 pints.
4 pk. = 1 bushel (bu.) = 32 quarts = 64 pints.

Avoirdupois Weight

27 11/32 grains (gr.) = 1 dram (dr.).
16 dr. = 1 ounce (oz). = 437½ grains.
16 oz. = 1 pound (lb.) = 156 drams = 7000 grains.
100 lbs. = 1 hundredweight (cwt.) = 1600 ounces.
20 cwt. = 1 short ton (t.) = 2000 pounds.
2240 lbs. = 1 long ton.

Troy Weight

24 grains (gr.) = 1 pennyweight (dwt.).
20 dwt. = 1 ounce (oz.) = 480 grains.
12 oz. = 1 pound (lb.) = 240 dwt. = 5760 gr.

Apothecaries' Weight

20 grains (gr.) = 1 scruple (℈).
3 ℈ = 1 dram (ʒ) = 60 gr.
8 ʒ = 1 ounce (℥) = 24 ℈ = 480 gr.
12 ℥ = 1 pound (lb.) = 96 ʒ = 288 ℈ = 5760 gr.

Number of cubic inches in United States Standard Capacity measures:

Liquid Measure Equivalents

1 Gallon contains 321 cu. in.
1 quart contains 57.75 cu. in.
1 pint contains 28.875 cu. in.
1 gill contains 7.218 cu. in.
1 fluid oz. contains 1.804 cu. in.
1 dram contains .225 cu. in.

Dry Measure Equivalents

1 bushel contains 2150.42 cu. in.
1 peck contains 537.60 cu. in.
1 quart contains 67.20 cu. in.
1 pint contains 33.60 cu. in.

Counting Measure

12 things = 1 dozen (doz.).
12 dozen = 1 gross (gr.).
12 gross = 1 great gross.
20 things = 1 score.

Stationers' Table

24 sheets = 1 quire.
20 quires = 1 ream.
2 reams = 480 sheets = 1 bundle.
5 bundles = 1 bale.

Size of Books

	Pages	Leaves	Sheets
Folio	4	2	1
Quarto (4to)	8	4	1
Octavo (8vo)	16	8	1
Duodecimo (12mo)	24	12	1
Octodecimo (18mo)	36	18	1

THE METRIC SYSTEM

The metric system is based on a unit of length, the *meter* which equals 39.37 inches. A cubic box one-tenth of a meter on the side has the unit of capacity, a *liter,* which equals 1.056 liquid quarts; and the water contained in a liter, weighs one kilogram, which equals 2.205 pounds. The unit of weight, the *gram,* in the metric system is the weight of water contained in a cubical box one-hundredth of a meter on a side. (Note: *These values are not precisely correct but hold for all but the most refined measurements.*)

The entire system is then built up by multiplying or dividing the unit by ten, one hundred, one thousand, using always the same prefix to indicate what the unit is multiplied or divided by, thus:

milli means 1/1000 or divided by 1000
centi means 1/100 or divided by 100
deci means 1/10 or divided by 10
deka means 10 or multiplied by 10
hecto means 100 or multiplied by 100
kilo means 1000 or multiplied by 1000

The tables then become:

Length

10 milli-meters = 1 centi-meter.
10 centi-meters = 1 deci-meter.
10 deci-meters = 1 meter.
10 meters = 1 deka-meter.
10 deka-meters = 1 hecto-meter.
10 hecto-meters = 1 kilo-meter.

Weight

10 milli-grams = 1 centi-gram.
10 centi-grams = 1 deci-gram.
10 deci-grams = 1 gram.
10 grams = 1 deka-gram.
10 deka-grams = 1 hecto-gram.
10 hecto-grams = 1 kilo-gram.

Capacity

10 milli-liters = 1 centi-liter.
10 centi-liters = 1 deci-liter.
10 deci-liters = 1 liter (1 cubic deci-meter).
10 liters = 1 deka-liter.
10 deka-liters = 1 hecto-liter.
10 hecto-liters = 1 kilo-liter.

In the metric system there is but one standard of weight, one standard of measure for liquids and dry commodities alike, and but one standard of length.

A Few Useful Equivalents	Approximate Equivalents
1 centi-meter = .394 inch.	4/10
1 inch = 2.54 centi-meters.	2½
1 yard = .914 meter.	9/10
1 meter = 39.37 inches.	39⅓
= 1.09 yards.	1 1/10
1 kilo-meter = .621 mile.	⅝
1 mile = 1.61 kilo-meters.	1 6/10
1 dry quart = 1.164 liquid quarts (U. S.).	1 1/6
= 67.2 cubic inches.	
1 liquid quart = .859 dry quart (U. S.).	6/7
= 57.75 cubic inches.	
1 liter = 1.056 liquid quarts (U. S.).	1 1/20
= .908 dry quart (U. S.).	9/10
1 cubic inch = 4.43 fl. dr.	4½
1 cubic meter = 1.308 cubic yards.	1⅓
1 cubic yard = 21.696 bushels (U. S.).	21⅔
1 fluid dram = .226 cu. in.	¼
1 hecto-liter = 26.42 gallons (U. S.).	26½
= .765 cubic meter.	¾
= 2.84 bushels (U. S.).	2 6/7
1 cord (firewood) = 4 x 4 x 8 ft = 128 cu. ft.	
1 barrel refined oil = 42 gallons.	
1 heaped bushel = 1¼ struck bushel or ordinary bushel.	
1 firkin butter = 56 pounds.	
1 gallon of water weighs 8.323 pounds.	
1 cubic foot of water = 7½ gal.	
1 gram = 15.43 grains.	15½
1 mili-gram = .0154 grains.	1/65
1 grain = 64.8 milli-grams.	65
1 ounce (Av.) = 28.35 grains.	28⅓
1 kilo-gram = 2.205 pounds (Av.).	2 1/5
1 pound (Av.) = .454 kilo-gram.	9/20
1 ton = 907.185 kilo-grams.	900
1 metric ton = 2204.62 pounds (Av.).	2200
1 long ton = 2240 pounds.	
1 carat = 3.171 grains (varies considerably).	

TO FIND CAPACITIES

Diameter of a Circle.—To find the diameter of a circle from circumference, divide the circumference by 3.1416; to find circumference, multiply the diameter by 3.1416.

Capacity of a Rectangular Box or Bin.—Multiply the length the breadth by the depth or height. The three dimensions must in the same units. For example: A bin is 6 ft. wide, 5 ft. 6 in. ep and 8 ft. 3 in. long. Its capacity is $6 \times 5\frac{1}{2} \times 8\frac{1}{4} = 272\frac{1}{4}$ bic feet.

Capacity of a Cylindrical Measure or Box, or Bin.—Multiply diameter by the diameter, by 3.1416, by the height, and divide

by 4. For example: If a cylindrical measure is 13 inches in diam ter and 6 inches in depth, its capacity is $(13 \times 13 \times 3.1416 \times 6 \div 4 = 796.39$ cubic inches.

Find the approximate capacity of a barrel of dimensions diffe ent from those given in the statutes by measuring the average diam ter and depth. *Example:* A barrel is 25 inches high between t heads inside. The inside diameter of the top and bottom is inches and the inside diameter at the centre is 20 inches. Fi the capacity. The average diameter of the ends and of the centr or (18" plus 20") $\div$ 2 = 19 inches. Then proceed as in the case a cylinder $(19 \times 19 \times 3.1416 \times 25) \div 4 = 7088.2$ cubic inche

Capacity of a Berry Box.—The approximate capacity of berry box which has sloping sides can be found by adding t area of the top and the area of the bottom and dividing by 2 get their average, and then multiplying this by the depth.

Example.—A berry box is 5.1×5.1 inches on top; 4.37×4.3 inches at the bottom, and 2.93 in depth, the content is [(4.37 $\times$ 4.37) plus $(5.1 \times 5.1)] \times 2.93 \div 2 = 66.1$ cubic inches.

To find the capacity of a berry box more exactly, find t area of the top and the area of the bottom, and the perpendicul depth. Then multiply one-third of the height by the sum of t top area, plus the bottom area plus the square root of the produ of the two areas.

Example.—A berry box is 5.1 inches on the side at the top a 4.37 inches on the side at the bottom. The depth is 2.93 inche then $(1/3 \times 2.93)[(4.37 \times 4.37)$ plus $(5.1 \times 5.1)]$ plus $\sqrt{[(4.3 \times 4.37) \times (5.1 \times 5.1)]} = 65.8$ cubic inches.

QUESTIONS

1. Explain the purpose of the Bureau of Standards of the Federal Gover ment at Washington?
2. What is the standard weight in your state of a bushel of potatoes?
3. Of a bushel of sweet potatoes? Of a bushel of onions? Of a bushel apples? Of a bushel of turnips?
4. What is the weight of a barrel of flour?
5. What are the weights of the different sizes of sacked flour?
6. What is meant by "heaped measure"?
7. What is meant by the "City Weigher"?
8. What is linear measure?
9. Give the table of United States Dry Measure.
10. Give the table of United States Liquid Measure.
11. How many ounces in an avoirdupois pound?
12. How many pounds in 1 cwt.? How many pounds in a short to In a long ton?
13. Give the counting measure.

PROBLEMS AND DEMONSTRATIONS

1. If you have a City Weigher in your community, what is his name and where is his office?
2. Does your city prescribe legal weights and measures? If not, does your state do so?
3. Secure from your city or state authorities any printed matter issued covering the law regulating weights and measures.
4. What are the legal requirements for the sale of bread in your city or state.
5. If a bread label is required, secure one, and explain any printed matter thereon.
6. Examine a bottle of milk or cream or its cap and explain any reading matter printed on the cap, or blown into the bottle.
7. How is ice sold in your community?
8. Does the law of your community or state require certain articles to be sold by heaped measure, and if so, name them?
9. Does it require any articles to be sold by numerical count, and if so, name them?
10. Is there any law in your community regarding "repacking," and if so, explain it?
11. If a bin is 8 ft. wide, 6 ft. 6 inches deep, and 8 ft. long, what is its cubic capacity?

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CHAPTER XX

CLOTHING

No person likes to be conspicuous either by overdressing or
underdressing, but a style suited to the individual in form a
color; to the occasion and place in material, make and trimmin
used and cared for with preservation in mind—such a style
dress does not call for the large output of money which fashio
show and neglect entail.

The effort to standardize dress in groups as for school, for co
lege, for houseworkers and for the business woman is an attem
in the direction of appropriate dressing and economy, which mo
nearly approaches the standard dress for men. Where no one
your associates spends more than you for dress, there is stimul
and inspiration—a real chance for adaptation, ingenuity and ski
from which good dressing results. If through standardizatio
comes lessened expense there will be for all a larger per cent. of th
income available for education, culture, travel, benevolence and oth
avenues of a higher life.

Clothing Expenditures.—Next to rent and food, clothing is pe
haps the most important item in the family budget. The only wa
in which a family can determine what should be spent for clothin
is to keep an accurate record of the family needs during an enti
year. The total expense for the year will be a fair index upo
which to base the monthly budget for the next year, providing du
consideration has been given to the amount and character an
age of clothing on hand at the beginning of the year. A good wa
to begin a study of clothing-cost is to make an inventory of th
wardrobe on hand, placing the lists in a blank book and assignin
several blank pages to each person's record. Add to the list of th
articles of clothing on hand facts as to date of purchase, cost an
present value. A survey of this list enables one to make plans fo
additions, renewals, and then with records of purchases as ma
during the year makes possible intelligent budget planning regar
ing the wardrobe for the year ahead.

In studying economies in clothing, there are several factors
be taken into consideration, as intimated in a previous chapte

One's social status of course means much when considering this subject. The laboring man whose work is out-of-doors, or in a factory or shop, does not need as expensive clothes as the man who must make a fair appearance in an office or elsewhere. Again, the day-laborer's family does not have the social opportunities or obligations that demand a more or less elaborate wardrobe. We are not, however, so much concerned with these varying conditions, as we are with the question of decreasing costs, whether for the laboring man's family or for the professional man's family. There are, however, two or three conditions that do enter into a discussion of this subject:

City Conditions vs. Rural.—Those living in or near large cities have certain advantages regarding the purchase of clothing not enjoyed by those living in smaller towns and rural communities. The large city stores frequently offer children's and women's garments at prices so low that one can hardly afford to make such garments at home. Fifteen years ago little boys' trousers, for instance, used to sell in such stores at twenty-five cents, which could probably not be obtained to-day for fifty to seventy-five cents. It might not pay the mother to make a suit for her boy from some adult's garment when clothing can be purchased for children at the low prices offered in such stores. In the small towns and rural communities, however, these opportunities are not usually available, although the clothing stocks carried in such communities are increasing in variety and the mail-order houses are doing much to meet the clothing problem of many farm homes. If the storekeeper could be assured of sales, he will often put in such stock. Even to-day in many cases the mother in smaller towns may well afford to make much of the children's clothing from material taken from the adults' cast-off garments. The problems of saving in the purchase or making of new clothing and in "making over" are of interest to everyone.

Knowing How to Sew.—There are nearly as many High Schools that teach sewing as there are High Schools that teach cooking. In 1914 more Elementary Schools were teaching sewing than were teaching cooking; and of High Schools, 232 reported sewing to 257 cooking. About 2500 High Schools out of a total of some 6000 were teaching household arts.

A census of the girl students in one town showed that over 90 per cent. of the families represented had sewing machines. Most women know something of making and of repairing clothing, but

how many of them can really cut out a pattern, fit and make a dress? If a goodly proportion are unable to do this, then we have found the key to one of the doors through which flows a great wastage in the average American home. If the mother cannot sew, and by sewing is meant an ability to make an ordinary dress, then by all means the mother should see to it that her daughter is taught this most practical and necessary art.

Dressmakers command all the way from a dollar and a half to three dollars per day, and many of them more than that. The dressmaker's bill in the home of many a family living upon a small income is a considerable item. There are many families of average means in which all the clothing of the mother and daughters as well as of the father and sons has been bought ready to wear. Some of this expense should and could be saved by the average family if some one or more of its members knew how to sew. A mother should feel that she has neglected her duty, if she brings up a daughter without teaching her this accomplishment.

Millinery.—Most girls may be taught how to sew, but few are able to become good milliners. This is a creative art that takes more or less talent and native ability. This fact, however, should not deter a mother from encouraging a daughter to learn how to trim her own hats. Millinery is always expensive in proportion to the other parts of a woman's wardrobe, and if one member of the family possesses the ability, and is taught the elementary principles of millinery, a great saving in the family budget may be made.

Children's Clothing.—If there is a member of the family that can sew, something may often be saved by making garments for little children, boys included, but one should first be satisfied that they cannot be purchased ready-made as cheaply as they can be made at home. Making at home may often provide a better material, and a simpler style. As suggested above, mothers may sometimes find it possible to make over adults' clothing for children.

Women's Clothing.—In this connection there are two things to be considered: first, fashion, and second, economy. If one overemphasizes fashion, economy tends to be disregarded. If one might disregard fashion, it would pay in the long run to purchase, as our grandmothers did, the most durable material. A good suit, for instance, could easily be made to wear for two or more seasons, and then the material would prove serviceable when sponged and ripped for making into some garment for one of the children.

-day, however, fashions change every year and sometimes oftener. is year's suit, if made in the extreme of fashion, may appear iculous next year. For that reason, some women do not plan t a suit will last a second season; thus the changing fashions e added for many a very considerable sum to the cost of high ng. Were it not for this "being in fashion," the woman who chases a twenty-five dollar suit, might better pay fifty dollars one that would last three seasons. This is the solution: to buy better material in a moderate style which with slight alterations l look well and wear two or more years.

False Standards of Dress.—Those women who choose clothes display only, who simply do as others do, who are bound by shackles of fashion, are doing nothing to reduce the high cost lothing in the clothing budget. Compare the attire of the better- ss working-girl to-day with her sister of the last generation. What he difference? Tailor-made suits; fashionable hats; silk waists; stockings and perhaps silk underwear and high shoes at six ten dollars a pair; these are the differences—costly and less rable materials. It is the same problem that confronts us in dying the family budget for food. Many of us demand the ractive, the most expensive and the rare foods, and similarly we demanding a standard of dress befitting the daughters of the lthy.

The principal method of reducing dress expenditures must be nd in a return to saner standards. Fashion must be brought proper bounds. Women must be taught to dress as an artist s how to frame a picture. The artist's concern is not with frame but with the picture. He desires to bring out certain lights; to emphasize the keynote of the picture and to har- ze its color-tone, and this he does in the selection of his frame. so, the woman should learn the art of dressing, which is a r of individual taste, not blind following of changing fashions. d of making of herself one of a million automatons, all g alike in the latest fashion, she should learn to select the and colors that will accentuate her individuality and har- with her character and duties. When she is willing to do e will be able to reduce the clothing expense, since the items wardrobe will remain serviceable for a longer time.

n's Clothing.—Men are not so much the slaves of fashion omen, although the professional tailors are trying to enmesh

them. Their clothes are more conventional and not so susceptible to radical changes in style. For this reason, it is economy for a man to purchase good material and well-made clothing, as a good suit or overcoat can easily be made to do for two, or even more than two, seasons. If a twenty-five dollar suit will last but one season, and a fifty-dollar suit will last for two seasons, the latter should be preferable, although two of the cheaper suits could be had for the same money, simply because the more expensive suit will undoubtedly show its value, keep its shape better and prove more serviceable. In general men do not give their clothing as good care as do women theirs, which helps to reduce the clothing budget.

"Made-to-Order" vs. "Ready-Made."—One great mistake made by many men consists of resorting to the made-to-order tailor. As soon as many men reach a certain financial station their first move is to have their clothing made to order. To-day the art of making clothing has been standardized. Many large manufacturing tailors dealing in "ready-mades" employ cutters at a salary of ten thousand dollars a year. These cutters are experts and they cannot be excelled even by the cutters of the most fashionable made-to-order tailors. Ready-made clothing is now made to fit almost any size or form, and with a few alterations any one may be fitted perfectly, regardless of size, without recourse to made-to-order tailors.

Splendid ready-made suits may be purchased at from thirty to fifty dollars that could not be duplicated by a made-to-order fashionable tailor for much more. Unless, then, a man is deformed, or very abnormal in size or proportion, there is little excuse to patronize made-to-order tailors. This is the greatest leak in the budget for men's clothing.

In General.—If it is possible, every adult should have two or more suits or overcoats and several pairs of shoes. Frequent change effect considerable of a saving in wearing qualities. A pair of shoes worn constantly will wear out much quicker than they would worn the same length of time but not continuously. The same is true of clothing. Cleaning, pressing and proper storage on coat hangers, etc., also conserve the wearing qualities of clothes.

Extravagances in Clothing.—One may well ask oneself, "Just what is strictly necessary in my wardrobe? Just what can I without? Is it necessary to have one or more evening dresses party gowns? Is it necessary to have a dress-suit? Is it wise

r a dollar, or three or five dollars for a necktie? Is it the right ng to dress the children so much better than their companions? ould I pay ten or fourteen dollars for a pair of shoes? Must I ve my shoes made-to-order? Is it really necessary to purchase de-to-order corsets?" These and a dozen similar questions, if estly answered, might reveal many practical measures for reduc- the budget for clothing.

Studying Materials and Construction.—In the more com- te courses in Household Arts, girls are being taught the nature l character of different materials and fabrics that enter into the ious articles of wearing apparel. There are a number of valuable ks on textiles, and the making of clothing, in which any intelli- t woman may now read upon these subjects and gain a knowledge t will be of practical value in the selection and care of clothing.[1]

Every woman should be able to distinguish between cotton and ol when manufactured into a garment; she should be able to tell approximate relation of one to the other in a mixture; she uld know something about silks and other textiles used in making rments; she should know of their relative wearing qualities, what pes and what trimmings will launder well, how to remove stains d spots, and to protect from insects, and about prices. Armed h such information and a little experience she should be able make a considerable saving in the budget for clothing. This study uld apply to every item that makes up the family wardrobe.

Outside Aids for Home Sewing.—Aside from the employ- t of a professional dressmaker, those who attempt to make or air or alter garments in the home, will find in the larger cities, s that make a business of special work for the manufacturer, lesaler, and dealer, and some of them cater to retail trade. The racter of such service and the usual prices (1916) are indicated the following:

Button-holes, 3 to 10 cents each.
Cording, 7 cents a yard.
Hemstitching, 10 cents a yard.
Mirroring velvet, 10 cents a yard.
Picot edging, 10 cents a yard.
Pinking, 2 cents a yard.
Ruching, 3 cents to 5 cents a yard.
Shirring, 3 cents a yard.

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[1] See Baldt, "*Clothing for Women*," Lippincott; and for proper laun- ng, spot and stain removal, see Balderston, "*Housewifery*," Lippincott.

Tucking, 1 cent to 2 cents a yard.

Plaiting—price varies from 2 cents per yard for material under inches wide, to 8 cents for 12 inches wide, 18 cents for 25 inches wide 40 cents for 72 inches wide; for plaiting a skirt, $1 to $1.50, according to length.

Buttons covered—plain flat and oval buttons covered with material furnished by customer according to size of button—No. 12 (⅜ inch in diameter) 10 cents a dozen; up to No. 50 (1¼ inches in diameter) 35 cents a dozen. Fancy-shaped buttons at slightly higher prices.

Other dressmaking services which may be secured outside the home include: Cutting, Hemming, Fluting, Ruffling, Smocking and Sponging.

The Clothing Wardrobe and Budget.—The selection of the wardrobe is best accomplished by planning ahead for a period of two or three years on the basis of one's present wardrobe and one's income. One is thus able to determine, among the larger items, those things which will wear out this year and must be replaced shortly, the things that will wear out next year, and other items that may give further service, and to distribute one's heavier purchases more evenly over the individual years. In addition, replacement must be provided for the items which give relatively temporary service, such as hosiery. Knowing what one wishes to buy, and alloting a definite sum for clothing purchased which is set aside each month in a budget check, there is a plan at hand and money at hand to take advantage of special sales and thus secure additional economies. Watching the announcements of dealers is a regular part of such a clothing program, which has advantages similar to special knowledge of food markets. The detailed discussion of the particular items of dress is treated elsewhere in this series of Manuals,[2] but as an example of clothing budgets for a family the following is presented from the Personal Service bureau of a progressive metropolitan department store[3] which maintains a Textile adviser to aid customers on the problems of dress selection. The family's income is assumed to be $3000, and the allowance for clothing is 15 per cent. or $450, of which the mother's clothing costs $165; the father's, $125; the son of nine, $60; the daughter of 13, $100.

[2] See Baldt, "*Clothing for Women*," Lippincott.

[3] William Filene's Sons Co., Boston, through whose courtesy these budgets are presented. The budgets are priced for the year 1916.

Years' Clothing Budget for a Woman having about $3 a week ng—

	This Year	Next Year
serge, a new one every year	$25.00	$25.00
skirt	5.00	5.00
ast two years	29.50	
ummer and one winter hat	12.50	12.50
rs on last year's hat	2.50	2.50
er, low white shoes, will last two years	4.00	
lack shoes	4.00	4.00
r, high black shoes	5.00	5.00
shoes, will last two years		4.00
om slippers, will last two years		4.00
de chine	5.95	5.95
silk	2.95	2.95
otton waists at $2	4.00	4.00
dress, will serve with changes two years		29.50
for winter	7.50	7.50
ng, two at $2	4.00	4.00
hin summer dresses at $3	6.00	6.00
pique for summer	3.95	3.95
hite petticoats at $1, will last two summers	2.00	
ilk	3.95	3.95
ast two years		2.50
ast two winters	3.00	
ast two summers	1.00	
ast two years		3.95
airs worn alternately at $3.50	7.00	7.00
eres, four at 50 cents each	2.00	2.00
airs	2.50	2.50
pairs silk at 50 cents	2.00	2.00
hree vests at 25 cents	.75	.75
nion suits at $1	2.00	2.00
, four envelope chemises or combinations $1	4.00	4.00
ummer nightgowns, cotton crepe, $1	2.00	2.00
inter nightgowns, will last two years	2.00	
rs, shoe trees, toilet accessories, handkerchiefs, purses, repairs, cleaning, etc.	8.95	9.50
	$165.00	$165.00

Two Years' Clothing Budget for a Man at $125 a Year—

	This Year	Last Year
Suit:		
One good suit each year to alternate with one from last year	$35.00	$35.00
Trousers:		
Extra	7.50	7.50
Overcoat:		
Will last for at least two years	30.00	
Raincoat:		
Will last several years		16.50
Hats:		
One for summer, $3		
One for winter, $3	6.00	6.00
Shoes:		
Three pairs at $5	15.00	15.00
Shirts:		
Six at $1.50 each	9.00	9.00
Underwear:		
Three summer union suits at $1	3.00	
Next year will only buy two summer union suits.		2.00
Two union suits for winter, $1.50	~~3.00~~	
Next winter will need three winter suits		4.50
Socks:		
Twelve at 25 cents	~~3.00~~	3.00
Sweater		5.00
Umbrella		~~3.00~~
Pajamas:		
Two for summer at $1.50, will last two summers	3.00	
Two for winter, will last two winters		3.00
Ties, collars, garters, buttons, gloves, repairs on shoes, etc.	10.50	10.55
Blanket Bath Robe, $3.95; slippers, $1		4.95
	$125.00	$125.00

Two Year Budget for 9-year-old Boy at $60—

	This Year	Last Year
Suits:		
For school, a winter corduroy suit with two pairs of trousers	$5.95	$5.95
Blue serge suit for dress-up	7.50	7.50
Summer, khaki suit with extra trousers	~~4.00~~	~~4.00~~
Two trousers at $1	2.00	2.00
Overcoat:		
Will last two years	7.50	
Rubber Coat:		
Will last two years		3.00
Shoes:		
Winter high storm boots	3.00	3.00
~~High~~ dress-up boots	3.25	3.25
Dancing shoes	2.00	2.00
Sneakers	1.35	1.35
Boy Scout play shoes	2.50	2.50

	This Year	Last Year
50 cents, with soft collars	$2.50	$2.50
5 cents, white, for dress-up	1.50	1.50
ap	.50	.50
wash hat or cap	.50	.50
lress-up hat	1.00	1.00
iit:		
; two years	~~1.50~~	
ast two years		3.50
Robe		2.50
airs at 25 cents	3.00	3.00
mmer union suits at 50 cents	1.50	1.50
nter union suits at $1	3.00	3.00
mer pajamas, will last two years, $1 each	2.00	
ter pajamas, will last two years, $1 each		2.00
50 cents; school blouses have collars ched	.50	.50
25 cents each	.75	.75
buttons, handkerchiefs, repairs on shoes,	2.70	2.70
	$60.00	$60.00

dget for 13-year-old Girl at $100—

$12.50	$12.50
	3.00
a for summer—may be worn more than one season	3.95
hat for winter	3.95
d plush hat for school	1.50
ner, four bloomer dresses of gingham at $2 each	8.00
loomer dresses both winter and summer for play and ol.	
que or poplin dress for best	5.95
er, blue serge sailor suit with bloomers	7.50
ress for dancing and Sunday	8.75
easily last two years.	
serge skirt to wear with middy blouses	2.50
t $1	3.00

Bathing Suit:	
Will last two years	$3.00
Bloomers:	
For gym. bought last year; will last two years.	
Bath Robe:	
Blanket robe bought last year; will last two years.	
Negligee:	
Cotton crepe	1.00
Knit Underwear:	
For summer, vests 25 cents, two this year. (Three next year.)	.50
For winter, three union suits, $1.50	4.50
Next year but two winter suits, using most worn one on hand for mending.	
Undermuslins:	
One slip	1.00
One combination corset cover and drawers	1.00
Corset:	
Corset waist	1.00
Shoes:	
High black shoes for school in winter	3.50
Rubbers	.70
High dress-up shoes for winter	3.65
Sneakers for gym.	1.25
White canvas shoes for summer	2.50
Play shoes for summer, elk soles	1.50
Nightgowns:	
Two cotton crepe at 69 cents for summer	1.38
Two flannelette at 69 cents for winter	1.38
Stockings:	
Twelve pairs at 25 cents	3.00
Umbrella:	
Will last several years	1.00
Gloves:	
White silk for summer	.75
Woolen gauntlets for school, winter	.75
Dress-up fleece-lined mocha gloves	1.00
Sundries:	
Hair ribbons, garters, handkerchiefs, repairs on shoes, etc.	5.00
	$99.96

The War and Clothing.—The war has called for special economies in dress; in general we are expected to wear clothing longer; to make over, repair, and otherwise conserve. The needs of the army are given precedence over private consumers and whatever we can go without is a direct freeing of labor and materials to national use.[4]

[4] See *"Clothing Conservation and the War,"* by Mary Schenck Woolman (in preparation), Lippincott.

QUESTIONS

hat factors are to be considered in the study of the necessary clothing for a family?
ill it pay a family in your town to make the clothing for the children? Why, or why not? What type of a family are you considering?
re there any articles of clothing for women that may be made at home more cheaply than they can be purchased?
hich is more important, fashion or economy in dress? May either be disregarded?
nder present conditions, is it better to buy expensive or medium-priced garments? What conditions enter into the decision?
low would you answer this question in relation to men's clothing?
hat should be the cardinal principle in the matter of dress?
hat can be said in favor of special tailor-made garments for women as well as for men? In favor of "ready-to-wear" garments?
hy should a woman's clothes budget be larger than that of a man?
hat would you call extravagance in clothing in your own case?
hould a business woman be expected to use her leisure in sewing?

PROBLEMS AND DEMONSTRATIONS

w much do dressmakers earn in the community in which you live?
w much a year does your family spend for dressmaker's services?
w much a year is expended for your own clothes?
w much a year does it cost your entire family for clothing?
w much a year do you think you should allow for the clothing for your family, based upon income and other expenditures?
w much is spent for millinery per year in your family?
n you save any part of the latter expenditure through the ability of any one in your family who might make or trim a hat?
cure as much information as you can in regard to the following textiles and other fabrics which names you know: Cotton, linen, flannel, wool, shoddy, crash, worsted, challie, gingham, silk pongee, percale, mercerized cotton.
s there any agency in your community where hemstitching, plaiting, tucking and button-covering may be done?

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PART III

FACTORS IN THE FAMILY BUDGET

CHAPTER XXI

THE HOUSEHOLD WORKING EQUIPMENT

THE purchasing agent for household equipment is usually a woman. The household manager should know best the needs of the house and the family. She then must know what is in the market from which to supply these needs. But this means knowledge of a multitude of articles from which she must choose, whether her purchase be priced in cents or hundreds of dollars.

Good buying rests upon knowledge of the needs and what is in the market, but choice is affected by many factors among which only a few can be mentioned. Economical buying means regulated buying.

Quality.—It is sometimes said that "The best is none too good," but the best at any one time means adaptation to the buyer's conditions. An article subjected to constant hard usage must be heavier or tougher than one used only occasionally or in gentle ways. A rug at the front door is chosen differently from one in the guest room.

Quantity.—While buying in large quantities may mean reduction in price, a larger number or amount than can be successfully used within a given time without deterioration means loss. Modern houses and apartments are not furnished with proper facilities for large storage. Thus lack of storage prevents having a large stock of china, linen and bedding as did our grandmothers. Other considerations may dictate buying smaller quantities—thus insect pests may destroy stored fabrics.

Whether intelligent care can and will be given may decide which rug or which table shall be bought.

Personal standards may determine quantities. Thus, a family of small income does not need in number or latest fashion, the silver, glass and china required for formal entertainments.

If storage room and the budget allotment allow, there are certain "constants" that may wisely be bought in the largest usable quantity. Among these may be mentioned soap, because it "uses better" when dry; thread, buttons, pins, tapes, cottons and dress goods in the family where children's clothes or underwear are made; canned

goods; stationery; table linen and towels at sales of discarded patterns or shop-soiled articles.

As with dress, so with household equipment, if happiness depends upon the possession or show of the latest fashion in every purchase there cannot be real economy in buying, for the factor of durability is ruled out.

Furniture should be judged not only by its artistic lines and its harmony with the general scheme of the house and family life, but because of durable material, firm enduring construction, wearable and cleanable finish—not too heavy to be moved nor too frail to fulfill its evident purpose. A dining chair must be low enough to let the knees go under the table and strong enough to hold a heavy man.

Use and Care.—Storage is a large factor in the care of possessions, for a place is occupied by and must be considered in relation to every article of purchase. Knowledge, strength and time are other important factors of care. If the purchaser does not know how to care for the expensive rug, she should not buy it; if the dining chairs she likes are too heavy for her to move and she does her own work, she should choose others; the milk pitcher which will not admit the dishcloth over even her finger in order to clean the bottom is not a suitable article of purchase.

Face towels are not made to wipe up floors nor to clean shoes. Appropriate usage, intelligent care, with a reasonable demand on strength and time, should help to decide the question of what and how much to buy at any one time.

Renewals.—However wise the purchase be, furnishings and supplies will wear out and must be replaced or renewed. System in management will make possible the purchase of renewals before the stock is exhausted; yet it should be so calculated that not too many purchases have to be made in any one week or month.

The budget allowance for repairs and renewals should be as carefully planned and adjusted as for any other item.

Trademarks.—Value in material, design, construction and finish, which is made possible by care in manufacture, is worth recognition by a trademark. In general, no manufacturer of poor goods will acknowledge or stand behind them. This shows the value of a well-established trademark. A trade name may or may not be a mark of value to the purchaser. If she has tested goods bearing a certain mark and found them worthy to her then that mark is a guide for future purchase. She must, however, be wary, for quality does not always remain uniform.

In table-linen, china, textiles, silver and similar articles, it wise to select from "open stock" patterns, if one wishes to kee to the same in renewals.

Arrangement of Equipment.—Having bought the equipment attention should be paid to its best arrangement in the house, for on this depends largely not only the beauty of the home but the time and labor expended and these are items which call for a large outlay of money. Especially should the best thought be given to the working centres in their relations to each other, to the requirements of each worker and to the family life.

No one room so lends itself to thought and improvement along these lines as does the kitchen, and it is wise therefore to study in detail the proper organization of this most important part of the household's working equipment.

THE ECONOMICAL KITCHEN

Time and energy saved is money saved, and since the kitchen is the working centre of the house a study of the business aspects of the household may include working conditions in the kitchen.

The Monetary Value of Household Labor.—The business man has not always figured the cost of employed labor as closely as that of equipment, whether in the form of raw or finished material. Now as accurate cost-keeping systems have developed whereby the manufacturer may know the exact cost of every one of his products, labor has been appraised at its exact cost in determining the cost of any given manufacture. In business, labor and time are practically synonymous, as the time employed in a given operation determines the cost of labor on that operation.

The household manager in her own home does not place a monetary value upon the time she spends in work, but her time does have a true monetary value, even if she does not recognize it; a reduction in her working hours allows her more time for the personal interests of her family and herself. When she hires a worker, the cost of service in the home is properly charged as an operating cost; if an improved plan for the day's work or for the arrangement of the house results in the saving of the maid's labor, the maid can assume some of the mistress' work, and so free her for other duties. It is perfectly feasible so to arrange and equip a home that the work will be reduced to a minimum. For example, anyone who has ever lived in both a house and an apartment knows how

ch less work there is in the latter as compared with the former. th proper arrangements and equipment, a maid may in some es be dispensed with, either with or without the employment outside labor for two or three hours a day to "do up" the igher work. Where no maid is employed, and the mother does work, the proper arrangement of a house means more time for t. For these reasons one should study house-planning and espe-lly the making of an "economical" kitchen.

Conditions Not Always Impossible to Change.—It is prob-ly true that most families are confronted with house or apartment nditions that seem fixed and incapable of change. In the case the rented house or apartment, we may have to take the rooms we find them, and often, if not generally, there is no opportunity change the position of either the sink or the stove. Plumbers oid placing sinks and pipes in outside walls for fear of freezing mperatures, and so we often find the sink on an inside wall and nsequently dark. Chimneys frequently are built against an tside wall, and so we find stoves a long way from the sink.

In a rented house landlords may be persuaded to make changes at might not be considered in an apartment, but aside from e sink and the stove much may be done by the aid of improvised elves and ready-built cabinets and tables to reduce the amount work in the kitchen.

For those who own their own homes, the problem of efficient rangement is much simpler. Most people shun the thought of modelling a room and the tearing out of a partition assumes an portance far beyond the cost of its removal. Fifty or one hun-ed dollars may be all that would be needed to make a kitchen an icient workroom, with a saving, in the work of the housekeeper, at will pay for the alterations in a short time. At the average ice for household labor, if one can be saved one hour a day, how uch will it be worth in a year? Obviously, a large sum.

The installation or removal of a partition; cutting an additional ndow; blocking up a door; making cabinets and shelves are not stacles that cannot be overcome, or problems that cannot be ved, if one owns one's own house.

Those who have their homes yet to build, of course, are in the t position to take advantage of the thought that has been ex-ded in the planning of model kitchens, and in the light of the rk that already has been done on this problem, it is almost inex-

cusable for an architect or builder to erect a dwelling contai
an inconvenient time- and labor-consuming kitchen. Many
provements are being made in apartment houses that are equ
applicable to the average house. One who contemplates buil
a house should first investigate the improvements of the modern
or apartment house.

Every possibility of saving steps should be considered.
has been demonstrated by the use of the pedometer, which sh
that the housekeeper travels several miles a day in her work,
most of this is done as she travels about the kitchen and from kit
to dining-room and back.

The Efficient Kitchen.—By the term "efficient kitchen

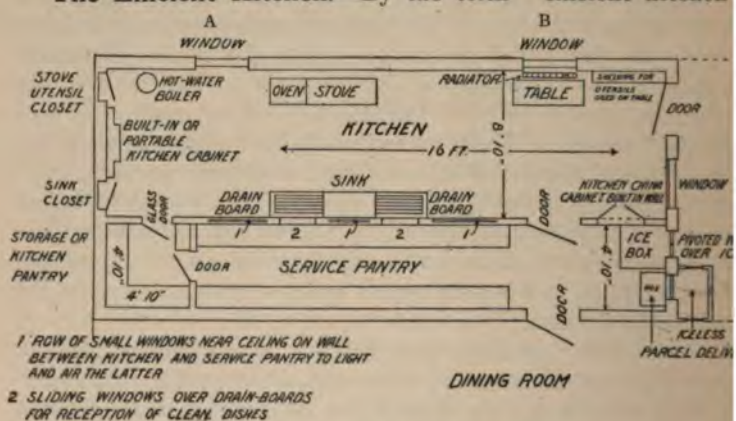

FIG. 22.—Plan of an efficient kitchen

meant one that will reduce to a minimum the time and labor s
upon kitchen operations. Needless to say that such a kit
means added conveniences.

Fig. 22 represents a plan for such a kitchen. In this illustra
the kitchen is 8.10 × 16 ft. long. It is separated from the din
room by two pantries, the "service pantry" and the storag
kitchen pantry. The two pantries occupy the length of the kit
each pantry being 4 feet 10 inches wide.

Many steps may be saved by this arrangement of the pa
Quite frequently the pantry is placed in the position occupie
the built-in cabinet in the diagram, thus necessitating many
from the extreme end of the kitchen through door into the di

room. With the pantry located as in the diagram the table in the dining-room may be set from the pantry shelves with a minimum of labor.

The Stove.—This is placed between two windows, the oven, if it has one above the range, being placed to the left and thus protecting open burners from the window; and the open gas plates, or range, being away from other window so as not to be affected by a direct breeze. Under window should be placed the kitchen table, so as to be handy to the stove. An important feature of every gas stove or coal range should be the small detachable shelf at the right for resting pots and pans removed from the open fire or flame. Some stoves do not have this shelf, but it is too convenient to be done away with, and every housewife should demand that her stove be equipped with such a shelf.

The Radiator and Water Boiler.—The radiator may be placed under the table or attached to the wall, which makes cleaning easier. If a hot-water boiler is used, it may be placed out of the way in the upper left hand corner, but with sufficient room behind it to allow for easy cleaning. It pays to cover any such boiler with an insulating jacket of canvas and felt, to prevent the cooling of the water by radiation. The opening of the door with its inrush of cold air will drive the warm air from the radiator back into the room, while any possible draft from windows will have the same effect. If the boiler is used the window will have a similar effect. A boiler may be suspended from the ceiling or enclosed in a closet. Both positions tend to save fuel.

Coal stoves are now made so that the ashes may be dropped from the ash-pit, through a chute directly into a receptacle in the basement. Such an arrangement would save much dirt and labor in the kitchen.

Sink.—The sink is against an inside wall and with the drain-boards; the location in reference to the pantry greatly facilitates the washing of dishes. Fig. 23 represents the inside kitchen wall that separates the kitchen from the service pantry. Notice the double drain-board and the sliding-window over each drain-board. This window slides into the wall partition, and as the dishes are wiped at the drain-board they may be passed through this window and placed upon a shelf inside the service pantry. When the task is completed, the dishes are arranged in their proper places upon the pantry shelves. This reduces the usual steps taken

in dish-washing operations to a minimum. Two or three steps from the sink will reach the stove.

Most sinks are entirely too low for the average woman. Manufacturers are beginning to heed the call for higher sinks, however, so that if insisted upon they may be obtained. A housekeeper should not be content to use a sink that requires much bending. If a new one cannot be substituted, the old one may be raised by placing blocks under the pedestals. If there is a back to the sink, the pipes leading to the faucets may have to be changed at the same time that the

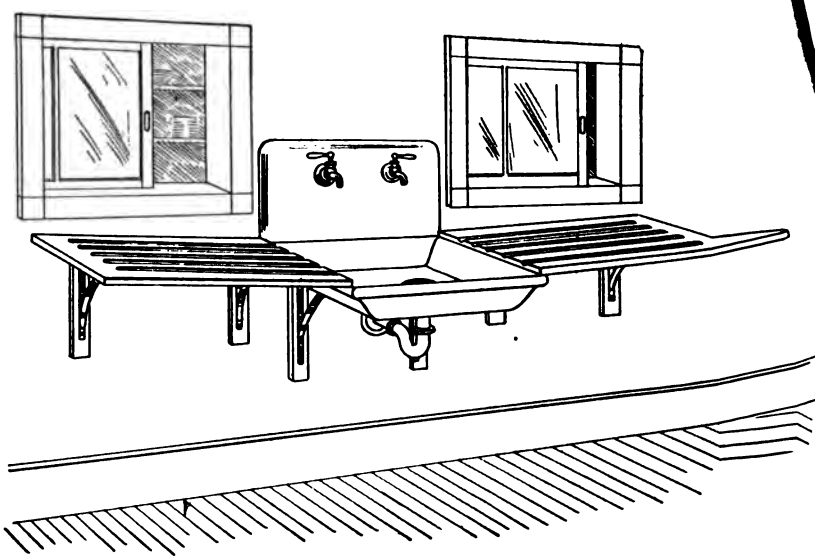

FIG. 23.—Sink with drain-boards at right and left, and with sliding windows above each drain-board which open into the service pantry

drain-pipe is raised. Devices to put under the dishpan and thus to raise the working surface for dish-washing operations may be purchased or made at home.

The drain-board is an important part of the sink to be considered. If possible, a sink should be equipped with a right and a left drain-board; the former to hold the unwashed dishes, and the latter to receive the clean dishes. If only one board can be had, let it be on the left side of the sink, as it is much handier to pass dishes from the pan to the left than it is to pass them to the right.

. small table, wheel-tray or a drop shelf may supply the missing rain-board.

Sink Closet (Fig. 24).—This is a small closet built into the itchen wall for the storage of cleaning implements, powders and oap, dish-cloths, dish-pans and everything used in and about the ink. In this closet one shelf is sufficient for floor cleansers, waxes nd similar preparations. Space is left below for hanging brooms, ops, and dust-pans. Fig. 24 shows an interior view of this closet hich is equipped with two or three narrow shelves with space below r hanging the dish-pan and other utensils.

FIG. 24 FIG. 25

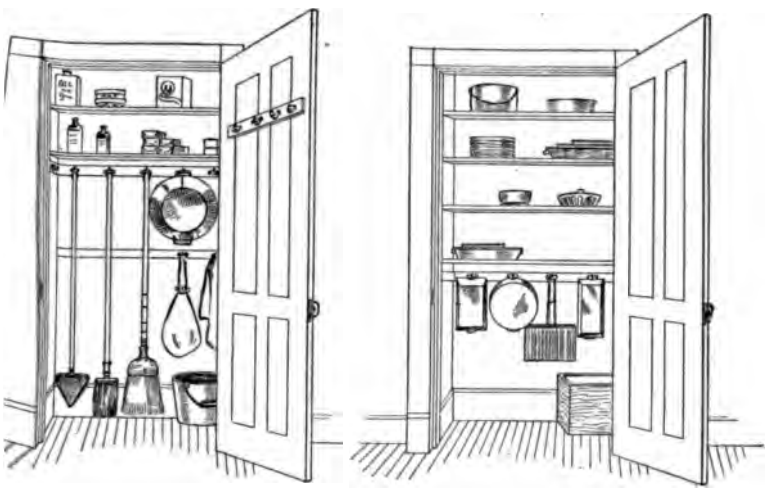

FIG. 24.—Mop, broom, pail and sink closet
FIG. 25.—Stove utensil closet

Stove Utensil Closet (Fig. 22).—This closet is also built into wall. The interior is shown in Fig. 25. Heavy pots and kettles l on the stove, together with pans, may be stored in this closet. plates and cooking dishes may be stored on the shelves. The vy articles should be stored about at hip-level.

Kitchen Cabinet (Fig. 22).—Between the Sink and Stove nsil Closets may be located the Kitchen Cabinet. This prefer- may be built into the wall, or it may be a portable cabinet. kitchen cabinet serves a useful purpose in the preparation of l material for the processes of cooking, and with the stove near

at the right and the sink at the left, this location of the cabinet is a convenient one, especially as light from the window brightens this end of the kitchen.

Kitchen Tables.—Many prefer a kitchen table, with convenient shelf room, instead of a cabinet. Tables are now made with various combinations, such as drawers, bread-boards, a swing-seat and hooks around the sides for hanging utensils. Enamel-top tables are especially desirable.

Built-in Kitchen China Cabinet (Fig. 22).—A built-in glass cabinet placed near window and door opening onto the porch may

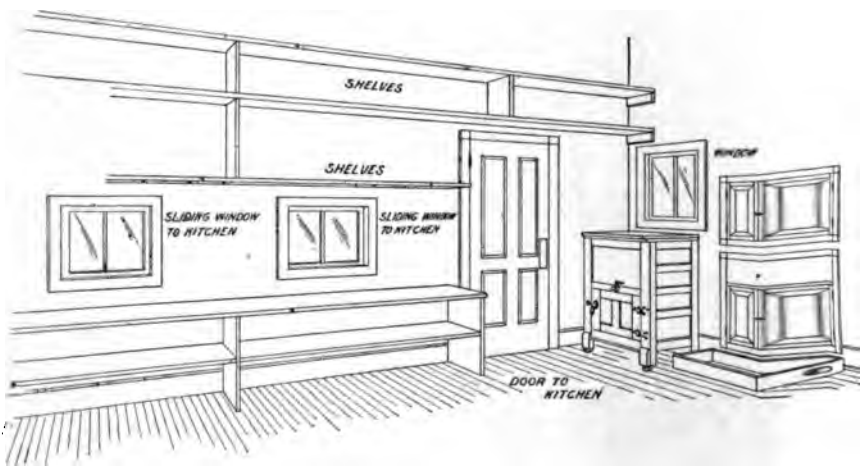

FIG. 26.—Wall of service pantry dividing same from kitchen

be used for the better china used in the kitchen, including decorative porcelains and delftware.

The Service Pantry (Fig. 26) shows the Service Pantry wall next to the kitchen. This pantry is intended to supply the dining-room, although perishable and temporary food supplies to be used in the kitchen and not kept in the refrigerator, should also be kept on the shelves shown in the illustration. Notice the sliding-windows above the shelf that open over the drain-boards of the kitchen sink. Fig. 27 shows the Service Pantry shelves next to the dining-room. Supplies and china for the dining-room should be kept on these shelves. Note the broad lower shelf for cutting bread and cake, and for preparing special foods and side-dishes.

Refrigerator (see Fig. 28) representing the outside end
ıe Service Pantry. In the left-hand corner is the refriger-
h an outside door on the kitchen porch for the reception
ɜ. This arrangement obviates the necessity of the iceman
nto the house.

Iceless Ice-box (Figs. 28 and 29) show a box-like device
ın the outside of the house and opening into the Service
It may be built of two thicknesses of wood with an air
ɔween. A shelf doubles the storage space. Ventilators
with cheesecloth to keep out dust admit fresh air. The

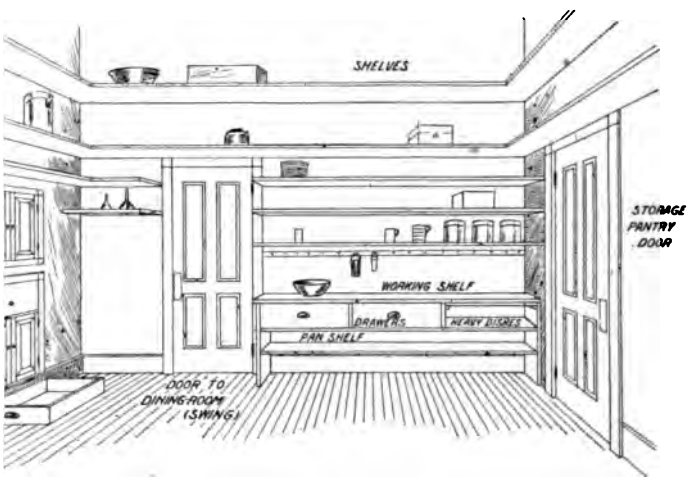

FIG. 27.—Side of pantry, next to dining-room

of this box is that of a storage place for food that may
ted to the outdoor temperature, if ice is unobtainable, or
asons of the year when ice may be dispensed with.

Evaporation Refrigerator.—This home-made device,
shown in the kitchen plans herewith, is now used success-
nany parts of the South and elsewhere. This convenience
ɜ a simple wooden frame covered with wire screening, and
with a door; this entire frame has a covering of canton
urlap, Indian-head cloth or linen crash made to fit so that
is admitted into it. Wicks made of the same material as the
tacked on top of each side of the cover and extend over

into the pan of water sitting on top of the frame. This water is taken up by the wicks and carried down on the sides of the cover by capillary attraction; then evaporation takes place, drawing the heat from the inside and lowering the temperature. The more rapid the evaporation the lower the temperature. Tests have shown if the refrigerator is kept in a place where the air circulates around it freely a temperature of 50 degrees Fahrenheit may be obtained.[1]

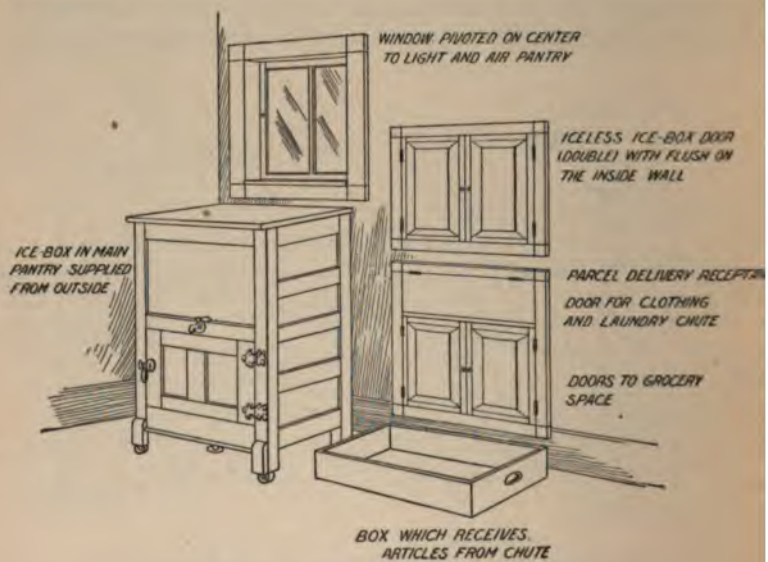

FIG. 28.—Interior end of main pantry

Iceless Refrigerator.—A power refrigeration attachment has been devised, which is operated by an electric motor or gas engine and which can be applied to almost any refrigerator. The machine can be located in the basement, if desired, and attached to three different refrigerators, or can be placed immediately in connection with a single refrigerator. Iceless refrigeration insures dry air, an even temperature of 45° F. or lower, so that fresh, sweet, wholesome food results.

[1] For detailed directions with working drawings of material, etc., see Rhea C. Scott, "*Home Labor Saving Devices*," Lippincott.

The initial cost is great, but in many families the saving in ice and food would in time justify the expenditure.

The Delivery Receptacle.—This is indicated in Fig. 22 under the door to the Iceless Ice Box. Fig. 30 shows the interior arrangement. Like the refrigerator this receptacle opens upon the kitchen porch. Its purpose is that of a receptacle in which delivery boys may leave groceries or other bundles, including laundry. The small, lower shelf is intended for milk, butter, meat and similar articles.

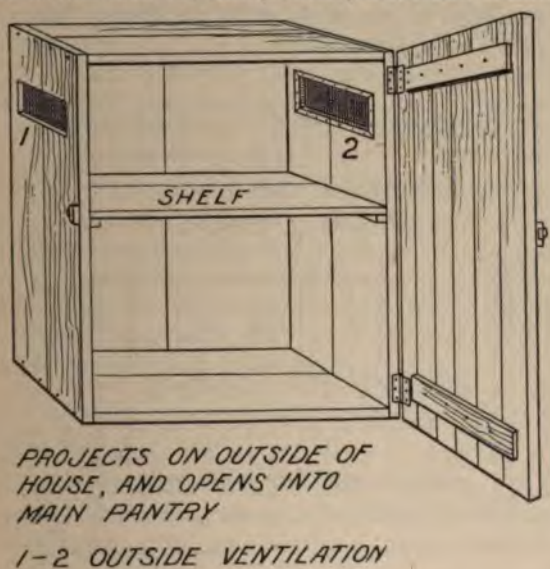

FIG. 29.—Scheme of iceless ice-box

The next shelf above is to be used for coarser groceries, including vegetables, while the third or upper shelf is intended only for laundry or clothing, that might be injured from drippings if placed below milk, meat or moist groceries. Having bundles left in this receptacle obviates the necessity of going to the door every time a delivery boy comes to the house.

The top shelf is supplied with a door of its own easily opening inwards. This is intended as a chute, so that laundry and valuable parcels need not be accessible to anyone who comes upon the kitchen porch, but may be pushed within the house by the deliveryman. The parcel will drop into a box upon the floor and can be protected

from the floor of the pantry (Fig. 26), or the box may be dispensed with.

The Storage Pantry (Fig. 22).—This is intended for the storage of food material purchased in bulk or in quantities. Canned goods purchased by the case and articles not for immediate consumption may be stored in this pantry. Bins are also provided for vegetables, such as potatoes, turnips, beets, etc. The pantry is also used for immediate kitchen needs. The kitchen worker uses this pantry as her base of supplies, while the dining-room needs are directly supplied by the Service Pantry.

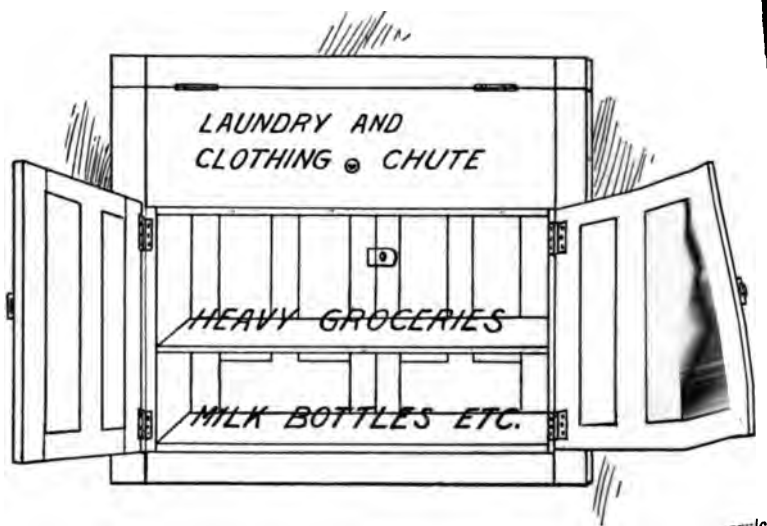

FIG. 30.—Inside view of delivery receptacle; inside doors open into service pantry and can be fastened securely with catches

Doors.—A doorway connects the two pantries. No door need be hung unless preferred. A glass door should be used between the kitchen and storage pantry. No door need be hung between the service pantry and the kitchen, but if one is used it should be a swinging-door; that is, one opening both ways. The same type of door should be used between this pantry and the dining-room. All these doors should be smaller than the regulation 3-foot door. The outside kitchen door opens upon the kitchen porch.

Windows.—The three kitchen windows light the kitchen and also the service pantry by special windows (1) and the sliding ser-

ɔws (2) (see Fig. 22). Over the refrigerator another window to light the pantries. This window should swing on a central . The glass door of the Storage Pantry lights this room suffi- y, and the doorway into the Service Pantry supplies also from the end window.

he length of the kitchen could be reduced by doing away the Storage Pantry, which would reduce the dimensions to 't. × $11^1/_5$ ft. This would also cut off the left window shown in 22, leaving a poorly lighted room, unless windows could be e cabinet side.

aundry Chute.—This device is intended for houses and not ments. Soiled linen may be dropped down the laundry chute ı receptacle or bin in the basement laundry, thus saving the ing of a basketful of clothes.

he Electric Fan.—No kitchen, where electric current is avail- should be without an electric fan. One or two shelves in nient and advantageous positions might be installed so that ın can be moved easily from time to time as necessity requires. ht and small-sized fan should be used in the kitchen so that n be lifted about easily. A metal portable shelf is in the et, which requires only a nail or screw to hold it in any place :d.

Then the heat of the kitchen is unbearable such a fan will a wonderful help. It may be used to establish air-currents ɜ proper direction so as to drive the hot air from the stove away the pantry and dining-room. In winter it may be used to ɜe the warm air about the room that comes from the radiator ɔve.

ish-washers.—Some housewives have found the hand ines satisfactory, although their efficiency is questioned. The ımy of an electric dish-washer depends upon the type used, and ze of the family. Many of the machines are cumbersome, and a small family, require about as much work to stack the s and clean the washer after use as would be necessary to the dishes by hand. With a family of six or more, a washer ɔy motor, and piped for hot water supply and disposal of waste :, will prove a great economy; dishes may be washed in it once to advantage. A small washer run by motor has been designed, h may be placed upon the drain-board of the sink and is there- ɔonvenient for the water-supply and also to the sink for drainage

purposes. The washing of dishes by hand and standing them in wire racks, after rinsing with very hot water, to dry from their own heat, is probably the best method in the small household.

Summary.—One should study one's own kitchen with a view to remodeling it, rearranging or replacing its furniture so as to reduce both time and work. The principles underlying the efficient kitchen apply as well to the domestic laundry, to the work of cleaning the house, and its other tasks.[2] With the aid of proper equipment, labor-saving devices and systematic methods of work, so much may be accomplished in reducing labor that the budget allowance for "Service" may be greatly reduced, while the home life is thereby kept more democratic.

QUESTIONS

1. What principles should control in buying towels? A chair? Silverware? China?
2. What should be the location of the sink in relation to the stove?
3. What factors should be considered in selecting a gas-stove, or coal-stove?
4. What factors should be considered in relation to a refrigerator?
5. What kind of iceless ice-boxes can you describe?
6. How much is included in "an economical kitchen"?
7. Where should radiators be placed in a kitchen? Where hot-water boilers?

PROBLEMS AND DEMONSTRATIONS

1. Draw a sketch of your idea of a model kitchen showing its relation to the pantry and dining-room.
2. Why do you think this plan a good one?
3. Draw a sketch of your kitchen at home, showing the arrangement of its furniture. Make measurements of floor plan, height of tables, sinks, etc.
4. Draw a sketch, or describe a method by which the kitchen at home might be remodeled to advantage or bettered by the addition of shelving or cabinets, or by changing the arrangement of the furniture.
5. Study the arrangement of your home equipment with economy of steps, movements and time in mind, while going through some imaginary work, such as making a custard, washing dishes or making molasses candy.
6. Have you ever counted the steps necessary to do any *one* process in house care?
7. If so, can you find a way to lessen them, without injury to the result?
8. Apply these principles of efficient work to the floor plan of a domestic laundry.

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[2] See Balderston, "*Housewifery, A Manual of Practical Housework*," Lippincott.

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CHAPTER XXII

SYSTEM IN THE HOME

SUCCESSFUL financial management rests in part upon the adoption of a well-considered system of household organization. The keynote of the housekeeping of the coming generation will be "efficiency." Every successful business has been built upon system, and without system business cannot continue to thrive.

System must obtain in the home as in business. The economic waste of time and material and energy in the average home is almost beyond computation. There comes a time in the history of nations, as in belligerent countries to-day, when the Government demands of its people an account of their stewardship in their family lives. Terrible as is war, it is sometimes a corrector of abuses that have existed for centuries, and, in a similar manner, the economic pressure of the present may literally force our American people to adopt a saner method of living.

The old-fashioned housewife, noted for loading the family table three times a day with a truly wonderful assortment of dishes, is rapidly passing into fiction and history. We are awakening to the fact that we do not attempt to feed our families, but that our main ambition has been to satisfy their appetites; a distinction with a decided difference. The body could be nourished better with a part only of the food served on many tables, and at a corresponding financial saving. In other words, many families serve more food than is necessary, and many people eat more than is required to nourish the body, so that in either case there is a financial waste. This is a fair example of the haphazard methods and lack of system employed in the average American family of the present day.

The proper kind of system not only means lessened financial expenditures, but a lessened expenditure of physical energy and an increased period of leisure for the household manager. System need not mean red-tape; it need not convert the home into a business office. Hard and fast routine that makes cogs of every member of the family in a complicated domestic mechanism is uncalled for, but definite plans for the business of the home are decidedly needed.

Grandmother's System.—Grandmother had a system adapted

to her needs, but practically unknown to the present generation. As near as the writer can remember, it was about as follows:

Monday, washday; Tuesday, ironing; Wednesday, baking; Thursday, mending; Friday, cleaning; Saturday, baking; Sunday, Lord's day.

Then, there were seasonal periods devoted to certain activities, such as spring and fall house-cleaning; weeks set aside for the dressmaker; others in the early fall for canning and preserving, and so all of the more important household activities were assigned to certain days of the week or to certain seasons of the year.

Since grandmother's day, economic and social conditions have changed. The social horizon of women has widened marvelously. The modern apartment has revolutionized housework, greatly adding to the leisure of the household manager. The public bakery has almost done away with "bake-day," while the delicatessen, often pernicious in its influence, has robbed many a young matron of her normal opportunity of learning to cook; but the latter influence will in time be overcome by our domestic science schools. Although grandmother's entire schedule may not be applicable today, it does not mean that system in the home is no longer necessary. New conditions demand a reorganization of household operation; in other words, a new system.

Present-Day Conditions.—Bake-day has never existed for the apartment-dweller and it has practically vanished for the city housekeeper. The bakery and delicatessen have greatly reduced the amount of cooking in the city home, and cooked foods are fortunately reaching the farm home and relieving its overtasked women.

If a maid is not employed, washday is any day the washerwoman can be secured; and where she is employed she usually combines washday with ironing day.

Vacuum cleaners, where introduced, have largely done away with the necessity for a special cleaning day. The lack of storage facilities precludes the possibility of extensive canning and preserving operations on the part of the flat-dweller; but the woman who lives in a house with a cellar and the woman on the farm still put up fruit and vegetables with true economy.

Conventions and social customs now obtain, especially in cities, of which our mothers knew little, and our grandmothers less. Today many married women are wage-earners, though where there

are little children it is hard necessity that forces them out of the home away from their first responsibility, the care of the child. The mid-day meal for most city dwellers is no longer dinner, and the term "supper" has almost passed from our vocabulary. Social and civic duties claim more of a woman's time than ever before. The life of the home is in a state of flux, and these changes in the life of the people have upset traditions, destroyed customs and broken many restraints, leaving the work of the household more hit-or-miss than it ever has been before. How a new system can be crystallized is a study that may be well called "household management."

Hard and fast rules cannot be given, but suggestions may be offered that will help solve the problem of system in the modern home, for it is absolutely necessary to conserve further the time and energy of the household manager as well as the finances of the home.

It must be kept in mind that the main purpose of any system is to reduce the amount of energy and money expended and lessen the time spent in the performance of definite operations.

System in Arrangement.—In the logical discussion of this subject, perhaps the first step to consider would be the arrangement of the house or apartment. This, however, is a matter that is not entirely susceptible to change. In the interior arrangement of the home the builder has many opportunities to reduce the work of the household manager. Only a few of these conveniences in planning can be mentioned as typical of detailed consideration to be given every part of the house.

1. A properly arranged kitchen and accessories as already discussed (p. 248).

2. Plenty of closet and shelf space throughout the house or apartment, and each storage element should be adjusted to its purpose, as linen, bedding, dishes, food and clothing storage, etc.

3. Laundry-room should be laid out to save steps; permanent fixtures installed in convenient location, as washer, wringer, machine ironer; laundry chute from second story to the laundry-room if it is made sanitary.

4. Plenty of light should be provided, especially in the kitchen and laundry.

5. A rear stairway in a house is a convenience.

6. A toilet separate from the bathroom.

7. Closets for cleaning implements on each floor.

8. Built-in furniture.

9. A lift from basement to kitchen; perhaps to the upper floors.

Many old houses may easily be changed so as to reduce the work a considerable amount, and even in the apartment, the kitchen and dining-room furniture, and the storage, may be arranged with an idea of saving steps.

System in Daily Routine.—The work of the house should be done on schedule. There should be fixed hours for arising and retiring and for the serving of meals. The work of the week should be planned and certain days should be set aside for definite tasks, duties and pleasures. Occasional processes like window washing, silver polishing, etc., should have their stated places.

Some have found it helpful to maintain a Weekly or Monthly Plan Book, as follows: Use a large blank book, bound or loose leaf. Keep a page for each day. On this page enter the work planned for each day of the coming week other than the regular routine. Social and business engagements, prospective shopping tours and other proposed activities should be entered on the page and this schedule should be developed at least a week in advance, though new items will be entered in it constantly, of course.

The routine schedule for the week, fairly constant throughout the year, should be made out and pasted on the inside front cover of the book, or written upon the first page. The plan book should be followed closely to get the greatest benefit. A similar plan is carried out by some who use a dated diary book for advance memoranda of daily plans.

Servants' and Children's Schedules.—Definite rules for the guidance of servants should be reduced to writing and placed in their hands in typewritten form. Necessary changes from day to day may be noted in writing or given orally, according to conditions. Printed books of instructions are now available. Full instructions to be followed in emergencies or in the absence of the mistress should be stated. All that is expected of a servant should be stated clearly and concisely. This would be especially desirable in hiring new help. Most disputes might be avoided by having a clear understanding to start with as to just what would be expected of maids and other help.

Children also should have their schedules, and a copy should be hung in their rooms. Hours for arising and retiring; for meals; for leaving the house for school and for returning; hours for

study and for play and tasks to be performed should be entered c such a schedule.

Score cards for many persons have proved a help in training i systematic habits. Good suggestions for these are given by E. J Purinton in his "Efficient Living" (pages 120, 200 and 216)..

System in Buying.—Aside from studying markets and mark conditions a definite system for buying should be inaugurate Daily ordering of groceries should be avoided. Calling up tl grocer or butcher several times a day is wasteful of time, both f the housewife and the dealer.

The last of each month make a rough inventory of kitch material on hand, including food supplies. Make out an order f enough staples, canned and package goods to last for an enti month. Canned and package goods should be purchased by tl dozen or by the case—usually a special price can be secured in th way—and investigation as to the best place to give the monthly ord will be worth while.

The last of each week the menu for the following week shou be made out, and one order put in at the local grocery for a supplies needed to supplement the monthly supply. This week order should include such perishable stuffs as butter, eggs a cheese for immediate delivery. Then write out on a separate she of paper, one for each day, a list of perishable food material nec sary for the weekly menu, to be delivered on the days stated. A the ordering of the family in this way may be cared for once week, except in emergencies. The groceryman will have yo written order and instructions for daily deliveries as needed, ea on a separate sheet of paper, while the staples have been order in quantities for an entire month's supplies, and most of the wee perishables have been provided for in the weekly order, or for da deliveries in advance.

Weekly and Monthly Menus.—As weekly menus are m they should be recorded. There are blank menu books on t market, each one providing for thirty-one days. Opposite appropriate side headings may be written the corresponding d to be prepared, or, if preferred, menu plans may be made part one's card catalog records. Card catalog menu records are often used.

Menu-making in advance is almost a necessity if a maid or is maintained, and if not it is equally as important. It lessens w

and saves the need of thinking each day what to have for the next meal. By planning ahead more economical purchasing is made possible. A trial at menu-making will convince one of its value. The problem of menu-making has been simplified by recent bulletins of the United States Department of Agriculture on "How to Select Food."

Buy Clothing Systematically.—In the purchase of clothing a similar system should be established. Two to four times a year the family wardrobe should be gone over, mended and put in order and an inventory taken. If the budget system has been established there should be money on hand for the necessary clothing at such periods. Socks and stockings, handkerchiefs, towels and napkins and similar articles should be purchased in dozen or half-dozen lots. Not only is a saving possible by this method, but the supply is always taken care of and the labor of replenishing lessened. Shoes should be inspected and, if necessary, sent to the cobbler. Garments susceptible of cleaning and renovating should be sent to the cleaners, and in this way the entire family wardrobe and household textiles should be mended, cleaned, renovated and renewed at definite intervals.

System in Household Accounting.—A budget system should be used in apportioning the family income. Every household manager should maintain a Family Ledger, as explained elsewhere, keeping a separate account with each item of household expenditure, such as clothing, food supply, etc. Such a ledger should show the amount and the date of payment of all bills. It should allow for a comparison of the grocery bill for each month, and of all bills periodically. Household bills should be paid by check once a month. Cash should not be used any more than necessary.

System in Saving.—If one intends to save, as everyone should, a definite system should be adopted. A certain amount should be laid aside at definite intervals; hit-or-miss saving will never provide a competence, or an old-age fund.

System in Physical Efficiency.—Once every three to six months every member of the family should undergo an examination by a competent dentist. Every tooth should be examined and, if necessary, cleaned and properly cared for. Adult members of the family should subject themselves to a thorough physical examination by a skilled physician at least once a year. Nothing should be neglected to make such an examination thorough. The best safeguard against disease is prevention.

Physical exercise of some kind should be indulged in by every member of the family, and this independently of the usual amount of walking or out-of-door exercise required by the work or play of the day. The securing of such exercises and examinations will depend largely upon the fact that they are performed at stated and regular intervals. Definite days for such examinations should be fixed and entered upon the family calendar and definite hours should be assigned for physical exercise.

Many men assign a certain day each month for the cutting of their hair, and so likewise if the women members of the family visit the hair-dresser or manicurist such work should be performed at definite intervals on assignments in advance.

There is no danger of reducing life to a machine-like grind by system of this kind. Regular habits make for health as well as happiness and they conserve one's time and energy for other things more worth while.

Business Forms, Time-Savers and Office Devices.—The proper financial administration of the household, so far as convenience and efficiency are concerned, turns in considerable part upon the use of appropriate business forms, time-savers and office devices and supplies in the home—arrangements which are the commonplaces of business practice in most stores and offices.

Office Equipment in the Home.—The average housewife has not realized the need of suitable office equipment. Pen, ink and pencil are hard to find, and if found they are generally almost unusable. If a parcel-post package is to be prepared for the mail, paper and twine are seldom in evidence. If bills of tradesmen are kept, dozens of them must be pulled from some hook and gone over before the right one is found. If a mail order is to be put in, postals seldom are on hand and the only writing material to be found is of the conventional social correspondence kind. The average housewife seldom keeps an inventory of her larder, and it is only when the last can of some material has been taken from the shelf that the necessity for replenishing that material is discovered. She takes the weight stated by the grocer, the butcher or the peddler and seldom troubles to verify it. Verification would indeed be impossible in the average home, as scales are seldom part of its equipment.

The business man is more likely to be careless about the insurance of his house and furniture than of his businesss property

and when the household property is insured, he often does not keep records of the time of the expiration of policies, or of such other matters as money due on household obligations, all of which is a matter of course in his regular business outside of the home.

For both the man and the woman in the home there is therefore need of emphasis upon business forms and methods, and since housekeeping is woman's special responsibility we must demand that she make proper provision in these respects and that she interest her husband and get his coöperation in such matters. The particular needs of each home should determine the methods employed.

A Business Desk for the Home.—Every household manager should maintain a business desk, and nothing should be kept in or on this desk except that which applies to the business of the home. It should be equipped with a good calendar; black and red ink; pens, pencils, scratch-pads, blotters, druggist's twine, paste or mucilage, and glue; a foot ruler, a tape measure and a yard-stick. Also, parcel post tables and postal rates; a postal scale; scissors; postal cards; stationery and envelopes; stamps; a check-book, and, finally upon the top of the desk, or near, should be found the card catalog, cook-books, account-books, dealer's catalog and price lists, and other reference works pertaining to the work of the home, including "first-aid" instructions. Such a work-desk will be found of inestimable value to the efficient housekeeper.

Any household manager will find much clerical work to be done about the house, and it cannot be done without system. Parcels must be sent by mail; orders written out and mailed; measures must be made before orders can be placed, and all such tasks demand pencil, pen, scissors, rulers or tape measures, paste and various other articles which are generally missing when wanted. If accounts are to be kept, bills paid, checks drawn and other clerical work performed, as is the case in every well-regulated family, it is simply absurd to provide no one place where such labor may be performed and no tools with which to work. A household manager's desk should be considered indispensable, and it will not be long before furniture manufacturers will fill this need as they have filled the need for kitchen cabinets. Let each manager place her desk where it will best serve her need. For one, this will be in the kitchen where she may watch the cake as it browns; for another, it should be in some other room that she may get away from the kitchen

atmosphere. Whatever it is—simple table with boxes, or a comple[illegible] desk—let it be in a light place, of right height and furnished wit[illegible] a comfortable chair.

A Typewriter in the Home.—Second-hand and rebuilt typ[illegible] writers of standard make and in usable condition can be purchase[illegible] in the larger cities for from fifteen to forty dollars. A typewrite[illegible] once used in the home will not be given up. Its uses will be fou[illegible] almost innumerable. Teaching children to use the typewriter [illegible] the home may be considered an educational asset. In using t[illegible] typewriter carbon or duplicating paper will be found useful in ma[illegible] ing out orders, inventories and records.

Document Boxes.—Every home should have a fair-sized, s[illegible] stantial document box. Valuable papers should be kept in a s[illegible]

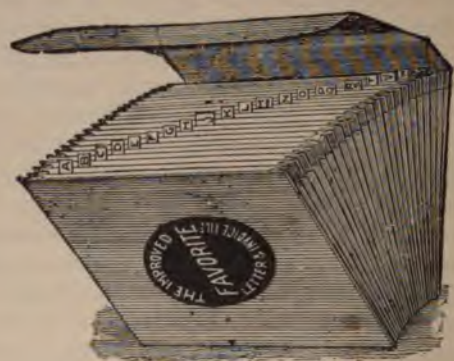

FIG. 31.—Simple method for filing bills

or in a safety deposit box in the local bank, but until they [illegible] placed there some safe, temporary storage place should be provide[illegible] Aside from legal papers, there are often important letters a[illegible] business documents one must refer to from time to time so th[illegible] a heavy document box in the home is almost a necessity. Wh[illegible] small amount of cash is kept on hand may be stored, with a reser[illegible] supply of stamps and other valuables, in such a box.

Modern apartments often contain safes built into the walls, a[illegible] they can be put into an old building as well. A picture hung o[illegible] the safe-door hides such a safe from view. These safes are s[illegible] posed to be fire-proof. Small fire-proof safes are also on the mar[illegible] and their weight makes them proof against the average sneak th[illegible]

Filing Bills.—Perhaps the most simple method of keeping paid bills will be found to be the expansible pockets, alphabetically labeled, shown in Fig. 31. Bills are filed in this case according to the name of the party issuing the bill. If desired, one of these cases may be kept for *paid* bills and another for *unpaid* bills. When bills are paid once a month it is quite essential to have some one place in which to keep them until paid. Such cases may be put to varying uses. A case may be used for nothing but receipts; another for letters, although a larger and slightly different shape is generally used for letters. (Fig. 32.)

If there are few bills, one or more large manila envelopes may be conveniently used. Such envelopes are useful for filing many memoranda.

Another method, but not quite so convenient, is to take a large

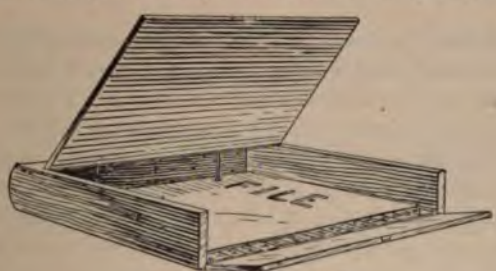

FIG. 32.—Letter file

bill-book and paste the receipted bills in the same. In such a case, bills of the same character would be entered on the same page. For instance, all the gas bills would be on one page; the electric light bills on another, etc. Only the top of the bills should be pasted, so that the next bill pasted in the same manner may be slipped under the first bill, leaving only the lower part of the second bill exposed, thus saving space. In this way, with one bill overlapping another, several may be entered upon a page. The filing case, or envelope system, however, is preferable.

The Use of Gummed Labels and Letters.—Gummed labels for placing on cans of fruits and vegetables have long been on the market. Similar labels may be had for drugs and medicines. Separate gummed letters of all sizes also are obtainable, so that one may make one's own labels. Blank gummed labels provide a space for writing in names and subjects. Boxes that are tied up

for the season should be labeled so as to indicate their contents. Closed boxes and tins in the pantry containing but one substance should each be labeled. But, of course, one should not go to extremes with this or any other device or plan. Dresser and bureau drawers should neither be labeled nor tagged, as some have advised. Abuse of a system brings it into discredit and prevents many from trying it. Almost any mother could go to the bureau or dresser drawers, open them, and in the dark put her hand on any of the children's clothes she desired to find, and the use of labels or tags for such purposes is unnecessary.

The Use of Forms and Note Books.—No one need wait until a printed form is found to answer one's purpose before starting a system of records. Loose leaf or blank books, such as high school students use in their studies, answer admirably for many household records.

Columns may be ruled in such books to meet one's special purposes. It is usually better to have several separate books of this kind for different purposes than to use one book for all purposes. Indications of the use of such records are given as follows:

Bills Payable.—Every family should have a record of debts and similar obligations. A business man keeps his record as "Bills Payable," which consists of the date and amount of his notes, when due, interest and to whom payable. He also has a record of all bills contracted, so that he knows at a glance the first of any month just how much he owes. A similar record should be kept by the family, but such a record is not intended to cover the current household bills.

Such a record should show the date of any note or other obligation contracted, the name of the party to whom the bill or note is payable, the amount of interest to be paid, if any; the amount of the obligation, and the date of maturity. A column should be provided for the amount allowed monthly from the family budget to extinguish the debt or debts, and another column to show the date the obligation is paid in full, with interest, if any.

Every family at some time contracts bills that cannot be paid perhaps for several months. Money sometimes is borrowed from the bank. Instalments may be coming due on musical instruments, automobiles, or real estate. In order to pay such indebtedness it is just as essential to make a budget of bills payable as it is to make a general budget for all of the family expenditures. From

one to several hundred or several thousand dollars may be due during the year. A certain amount should be set aside from the family income every month toward a sinking fund to discharge such obligations. The total amount will thus be distributed over a series of months that each month may bear its share of the obligation.

Budget for Indebtedness.—Suppose a family is confronted with the following conditions:

(INDEBTEDNESS, JAN. 1, DUE DURING COMING YEAR.)

Interest on mortgage, $15.00 due July 1st, 1920, and $15.00 Jan. 1st, 1921	$ 30.00
Payment on piano, $5.00 per month, for year, total	60.00
Note due at bank, April 1st	100.00
Interest on same to maturity	1.50
Due Smith & Co., work on house, open account	150.00
Taxes must be paid not later than August	36.00
Water tax, $9.25 due May 1st, and $9.25 due Nov. 1st	18.50
Total	$396.00
If $50 of note is renewed, interest at 6 per cent. for 3 mo. would be	.75
Total	$396.75

From the above we see that $396 must be paid within a year, in addition to other expenses. This would mean that $33 per month must be laid aside to discharge this indebtedness of $396 within the year, but $33 per month would not pay all of these items *exactly when they fall due.* How, then, are we going to budget these various debt items per month? Some of these items *must* be paid when due. The only two items that may not necessarily have to be paid when due are the open account of $150 and the note at the bank. In this case one should arrange with the bank to renew part of the $100 note, when due, for another three months. The

APPORTIONMENT FOR PAYMENT OF ABOVE

	January	February	March	April	May	June	Total
Interest	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$15.00
Piano	5.00	5.00	5.00	5.00	5.00	5.00	30.00
Bank	17.16	17.16	17.18	16.91	16.91	*16.93	102.25
Smith	.55	.55	.53	.80	.80	.78	4.01
Taxes	6.00	6.00	6.00	6.00	6.00	*6.00	36.00
Water	1.85	1.85	1.85	1.85	*1.85	1.85	11.10
Total	$33.06	$33.06	$33.06	$33.06	$33.06	$33.06	$198.36

*Debt extinguished with this payment.

	July	August	September	October	November	December	Total
Interest	$2.50	$2.50	$2.50	$2.50	$2.50	*$2.50	$30.00
Piano	5.00	5.00	5.00	5.00	5.00	*5.00	60.00
Bank	.....	.....	.....	.....	.....	.....	102.25
Smith	24.08	24.08	24.08	24.08	24.08	*25.59	150.00
Taxes	.....	.....	.....	.....	.....	.....	36.00
Water	1.48	1.48	1.48	1.48	*1.48	.....	18.50
Total	$33.06	$33.06	$33.06	$33.06	$33.06	$33.09	$396.75

items may then be budgeted as shown, remembering, however, that if $50 is paid off on the original $100 loan, and $50 renewed for another three months, the interest on the $50 for three months will be 75 cents, making $396.75 for the year.

From the above it will be seen that Smith & Co. have been paid no interest on their open account, and that the payments on their bill have been delayed in favor of other creditors. It is also assumed that the family income will not permit of more than the above amounts allowed monthly for the liquidation of all indebtedness as shown.

If Smith & Co. insisted upon earlier payment the only recourse would be to borrow more money during one or more of the months prior to July 1st, renewing the notes at the bank from time to time.

A blank form may be ruled for Bills Payable as follows:

FORM 1 *Bills Payable*

Item	Date Contracted	When due	Amount due	Interest	Total
Total due during the year					$

The following form may be used:

FORM 2 *Amounts Due per Month* (As given above)

January...	$	April.....	$	July.....	$	October..	
February..		May		August...		November	
March....		June		September		December	
Total...	$	Total...	$	Total...	$	Total...	$

A form for apportioning the payments to be made upon indebtedness may be used as follows:

FORM 3 *Apportionment for Monthly Payments*

Items	January	February	March	April	May	June	July	August	September	October	November	December	Total
Totals....													

Bills Receivable.—Some families have accounts due them, instead of owing others. These accounts may be "open accounts," those not secured by notes or mortgages; they may be in the form of notes; interest due; principal on investments due; rents, and wages or salary. In other words, they represent the investments and the income of the family.

All these items should be listed and a small note book may be used the same as for "Bills Payable." Practically the same form used for Bills Payable will answer the purpose, as shown by Form No. 1. The heading "Date Purchased," or "Date Loaned," may be substituted for "Date Contracted," although this heading will answer very well.

If rents are being paid it is not sufficient to know that they

have been paid, but one should keep a record of the date they were paid, as such evidence may be important in some unforeseen contingency.

Ruled pages for "Bills Receivable," and also "Bills Payable," may be had in the larger stationery stores, as well as ruled books made especially for this purpose. It takes only a few minutes at any one time to make such entries, and a few hours a month should be sufficient to keep every form of record used in the family. The household ledger and accounting forms have been discussed in Chapter VI.

Household Inventory.—Mention has also been made of the value of keeping a household inventory. Such an inventory may be kept in several ways. A blank book may be used, and all household articles listed therein in any order that may be convenient. Such a record should show, if possible, the following facts:

1. Date purchased.
2. Date of inventory.
3. Art and bric-à-brac.
4. Description (if desired).
5. From whom purchased.
6. Amount paid.
7. Estimated value at date of inventory.
8. Amount of insurance carried on any particular article, such as a piano.
9. Total insurance carried.
10. Date of expiration.
11. Premium paid.
12. Date paid.

One article will seldom be insured to the exclusion of others. The articles.

It may be best to classify household furniture and possessions in grouping articles of a similar nature on one page. The following grouping is suggestive:

1. Books.
2. Pictures.
3. Art and bric-à-brac.
4. Rugs and carpets.
5. Curtains and sofa pillows.
6. Cut-glass.
7. Valuable china.
8. Silverware.
9. Jewelry.
10. Musical instruments.
11. Music rolls.
12. Phonograph records.
13. Table linens.
14. Bedroom and bath linens, etc.
15. Clothing (under name of individual).
16. Kitchen and dining-room ware.
17. *Furniture.*
    - (*a*) Living-room or parlor.
    - (*b*) Reception hall.
    - (*c*) Music-room.
    - (*d*) Library.
    - (*e*) Dining-room.
    - (*f*) Kitchen.
    - (*g*) Miscellaneous rooms.
    - (*h*) *Bedrooms.*
      - Bedroom No. 1, No.
      - No. 3.

The above are mere suggestions. If such a classification is used a page may be given to each group, or to each room, if desired, leaving blank space, or pages, for entry of items purchased later.

An inventory form may be used as follows:

Household Inventory

RM 4 (General Classification)

Item	Description	Date purchased	From whom	Cost	Date of inventory	Present value
Totals...						

On a separate page might be entered facts pertaining to the surance, such as the following:

me of company..... Amount of policy $.....

me of agent..... Policy covers.....

piration of policy..... .....

mium paid..... .....

Taking Stock Once a Year.—Every family should take stock ce a year of its assets, as well as of its liabilities, and a program d budget made for the coming year based upon such a process ay then be made intelligently. Such a listing of property owned d debts owed made January 1st each year to show the net worth roperty minus debts) will be a valuable annual test of financial ogress, and with the Federal Income Tax now becomes a necessity.

The inventory should be gone over carefully and losses and preciation marked off. Insurance policies should be checked up d provisions made for any renewals. Clothing should be looked er with a view to the coming year's needs, and stock of groceries. of any considerable amount, should be inventoried Such a check-g-up would probably pay at least twice a year, and, with regard certain goods, as foods and clothing, once each season, that is, ur times a year.

Present and Prospective Needs of Repairs.—It is well to

keep a blank book in which may be jotted down from time to time the important necessities required in the way of property repairs. The record need be kept only by one owning one's own home or other property, although for a tenant such a record, modified to suit, serves as a reminder and may well be shown to the landlord. These needs might be classified as follows:

(*a*) Repairs and changes that must be made at once.
(*b*) Repairs and changes that must be made in the near future.
(*c*) Repairs and changes that must be made as soon as finances permit.

The house and grounds and barns or garage, if any, should be gone over at frequent intervals and the following inspection made:

Exterior.—

1. Repainting needed?
2. Roofs need repairs?
3. Gutters need repairs?
4. Doors, windows and blinds?
5. Gates and fences?
6. Walks?
7. Lawns?
8. Gardens?
9. Removing trees or shrubs?
10. Insurance?

Interior.—Each room should be gone over thoroughly, including halls, and the following inspection made:

1. Painting or calcimining?
2. Papering?
3. Doors, windows, and blinds?
4. Closets?
5. Stoves and furnace?
6. Lighting fixtures and lamps?
7. Plumbing?
8. Floors and stairs?
9. Furniture?
10. Rugs and carpets?
11. Kitchen utensils?
12. Insurance?

By keeping the house and its contents in good repair large expenditures at any one time may be obviated, and if such an inspection is made throughout the year and repairs made a few at a time there will not be so large an expenditure awaiting the end of the year. Such an inspection should be made the last of the year in any event.

A Policy Record.—Instead of keeping a record of insurance policies on household furniture and possessions in the inventory it may be better to keep all records of policies in one book. The record should show the following classifications on different pages:

1. Life insurance.
2. Health insurance.
3. Accident insurance.
4. Building insurance.
5. Personal property insurance.

Each page should show the following facts:

1. Name of company.
2. Number of policy.
3. Date of policy.
4. Expiration of policy.
5. Term of policy.
6. Nature of policy.
7. Amount of policy.
8. Amount of premium.
9. Date when premium is due.
10. Date of payment first premium.

A form for such a record follows:

Policy Record

FORM 5 (Classification)

Name Company	No. Policy	Date	Expiration	Amount	Premium	Date Due	1st Pre. Paid	Miscellaneous
Totals								

Miscellaneous Records.—If the Household Ledger, previously mentioned, is properly kept it will give a record of the miscellaneous information so frequently desired, such as a record of taxes, rents and other bills paid. The special forms mentioned in this chapter are not intended to be records of expenditures, but memoranda pertaining to the details of such things as debts, notes, inventories, policies and similar items.

Card Records.—The uses of the card record system are so varied and numerous that it would perhaps pay any housekeeper to investigate the different printed forms already published.

Recipe card records are on the market, both printed and blank. Addresses may be kept on cards. Appointments may be so kept and classified according to date. The use of this system is so varied that a full description of all the uses to which it may be put could not be given in a work of this character. One should visit a stationery store, as well as one keeping card systems, and examine the various devices, appliances and forms and see if they cannot be adapted in some way to reduce the labor of the home. With this thought in mind, a visit to a business office to which one has access may prove profitable.

A household accounting system also may be kept on cards 4 × inches. Each card may record one item of household expense, t same as described in the chapter on the Household Ledger.

White paper slips may be cut from waste writing paper or tak from paper tabs, obtainable in any stationery store, and these sli may be used in place of the regular cards for card record syste Such slips will be much less expensive than regular cards. Th may be dropped into the shopping bag as lists, the cost added known, and filed away on return as the record of expenses.

A card case similar to the one shown in Fig. 33 may be p chased for from 80 cents to $2.40. 3- by 5-inch cards will serve ordinary purposes. Trays and boxes are made in sizes to fit cards. Cards cost from 75 cents per thousand, according to thi ness or weight.

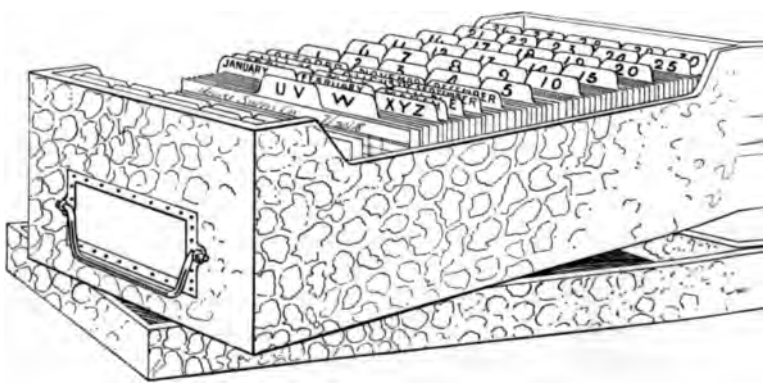

Fig. 33.—Card tray

In the keeping of all records it should be kept in mind that much data as possible should be entered with every expense it in the Family Ledger. All other forms and devices are mer supplementary so far as expense records are concerned. The fore these records must not duplicate, nor be confused with the m important Family Ledger.

Cards may be purchased in different colors and a different co used for each distinct purpose. Guide cards, each one showing letter of the alphabet, as indicated by Fig. 34, are used to separ the cards into an alphabetical division. In the place of alph betical guide cards, numerical cards may be secured.

In one box several different kinds of records may be kept, and a tab card with an appropriate heading be used to introduce each different section of cards. Blank tab cards are available on which the user enters the heading desired.

Address and Telephone Record.—One often needs to keep names and addresses and telephone addresses, not merely of friends and acquaintances, but of business firms and of places at which

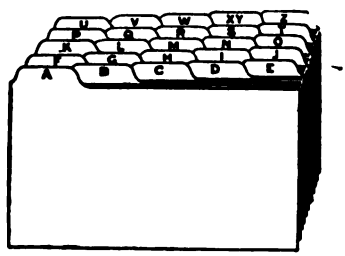

FIG. 34.—Alphabetical guide cards

certain repairs may be made. If only one box is being used, secure about fifty white cards and one set of colored alphabetical guide cards. This record may be kept according to the name of the individual or firm whose name it is desired to keep, and also according to subjects. As an illustration, suppose it is desired to remember the name and address of a man who fixes umbrellas. The card could be made out as follows:

> "UMBRELLAS"
>
> SMITH, JOHN
>
> 2126 Division Street
>
> Phone, Division 2126

In this case the card would be filed under the letter "U." It may also be cross-referenced by entering another card in the box with the heading "John Smith" at the top.

Appointment Record.—All kinds of dated appointments may be entered on cards and filed in this division, also prospective tasks and duties. For instance, if it is desired to purchase certain articles at fixed dates of the month a card may be made out showing the

articles needed. A different colored card is used, and in place of alphabetical guide cards we now use numerical guide cards, and the cards are filed under the date the appointments or purchases are to be made. One can always look a few days ahead in the record and see in advance what is coming up for attention.

Such a dated record may also be conveniently kept in a diary book or page-a-day record.

A Physical Record.—This is arranged alphabetically, either according to individual names of members of the family or according to subjects, such as Physician or Practitioner, Oculist, Dentist, Physical Culture, etc. Each card should show just what work has been done for a member of the family and when the work was done.

Recipe and Pantry Record.—A larger colored card may be

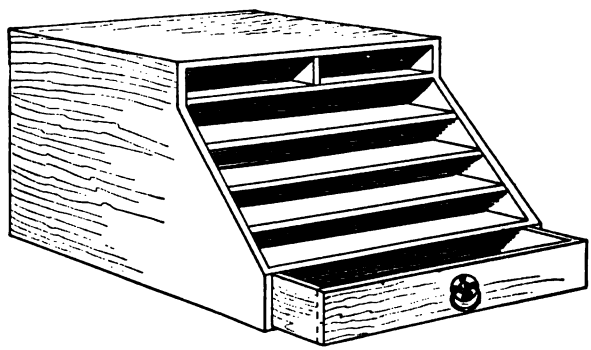

FIG. 35.—A receptacle for stationery

used for recipes which should be filed alphabetically. Recipes may be as full or as meagre as necessity requires. Pantry and other storage records may also be conveniently put upon cards. Cards may be used for menus (p. 279).

Miscellaneous Record.—A miscellaneous record on another colored card might be used for filing various kinds of information and data, including information that might be of value, or which one might wish to look up later, such as the sizes of clothing worn by different members of the family.

Follow-up or Reminder Tabs.—Small follow-up tabs may be purchased in different colors; these tabs are so made that they may be slipped over the top of a card. They serve as reminders, each color being used for a separate purpose; for instance,

color could be selected as indicating the first day of the month, another to indicate the tenth day and another for another date. Used in this way any card bearing a certain colored tab would mean that that card demanded attention upon the day indicated.

Miscellaneous Office Devices for the Home.—The illustrations on pages 282 and 283 explain their own uses. The stationery rack, Fig. 35, furnishes a cheap and a convenient receptacle for stationery. The hanging wall rack, Fig. 36, may be used for various purposes, not only in connection with desk work, but in the kitchen as a temporary receptacle for circulars, laundry lists, bills

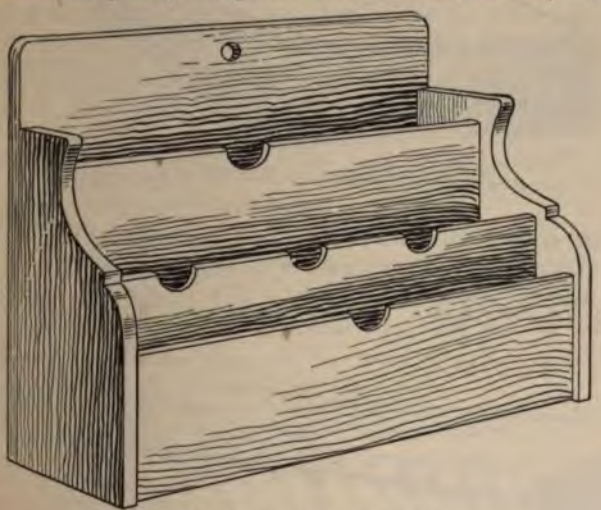

FIG. 36.—A hanging wall rack

and similar papers. The Everyday File, Fig. 37, will be found convenient for filing references that need immediate attention, while the distributing box, Fig. 38, will be found desirable for filing addressed envelopes and bills with checks awaiting delivery.

Every home should have a pencil sharpener. There are numerous other office devices that may be made to serve a valuable purpose in the home.

Conclusion.—"A place for everything and everything in its place" is an old saying that sums up the problem of system in the home, especially when combined with the phrase, "A time for everything."

Ask yourself how you may shorten every operation connected with the upkeep of the home; how may the amount of work be lessened, and how may expense be reduced, friction avoided and leisure time increased.

The value of all records and systems lies in their simplicity.

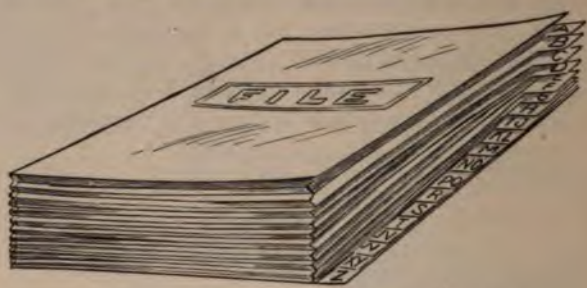

FIG. 37.—Convenient for filing purposes

Too much system will kill the very purpose for which it was in tended. Often, it may take more work and time to keep a syst than it does to do the work itself. The forms and the metho mentioned in this study of household management are intend

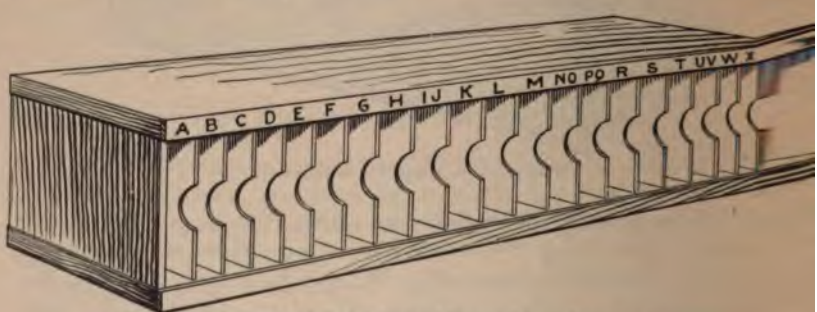

FIG. 38.—Convenient for filing addressed envelopes, etc.

to be suggestive. The theorist and the student of household ar have much to learn from the practical housekeeper, while the latt undoubtedly may learn from the former. As in all things, a mediu course should be pursued and suggestions should be adapted to t needs of each individual home, and not the home to the system.

QUESTIONS

1. What is meant by "system"? What should be the prime purpose of system in the home?
2. How may system be followed in buying? In planning meals?
3. Why is system necessary in saving?
4. Is there any advantage in purchasing in quantities?
5. What are the advantages of keeping receipted bills?
6. How would you file household bills?
7. Define the terms "Bills Payable" and "Bills Receivable."
8. Why should one make a budget of his indebtedness?
9. How would you keep valuable papers?
10. What is a household plan book?
11. How did our grandmothers apportion the work of the week?
12. What present-day conditions have been brought about by labor-saving devices in the home?
13. What is the advantage of making weekly or monthly menus in advance?
14. What is a household inventory and what is the value of such an inventory?
15. How would you classify household goods in an inventory?
16. What is meant by a "card record"? Name the purposes to which a card record system might be put in the home.

PROBLEMS AND DEMONSTRATIONS

1. What regular days are assigned in your home for the performance of certain activities?
2. Make an outline, sketching any particular system now used in your home.
3. Make a day's schedule for a home, consisting of father, mother, two children, eight and twelve years of age, and one servant.
4. Suggest a schedule covering a week for two children, one boy, six years, and one girl, fifteen years of age.
5. Write out a schedule for a maid, setting forth those duties not included in the ordinary routine of the day.
6. Make out an order for staple groceries to cover a month's supply for a family of five, including two children.
7. Make out a week's order for other groceries not included in the above order, but intended to supplement the same.
8. Write out a scheme for dispatching the work of the home through the use of office devices.
9. List the names of any forms or records kept in your home.
10. Make a list of any labor-saving office devices in your home.
11. Secure a stationer's catalog or one of office devices and list in a note book all the devices that might be used in the home.
12. Draw a blank form that might be used as a page in an inventory book.
13. Make an inventory of your clothes; your books; the furnishings of your room.

14. Secure an inventory book, or any blank book, and make an inventory of household goods in your own home.
15. Mr. Jonas has $30.00 interest due the first day of January and the first day of July. He is making monthly payments of $10.00 a month on furniture, which payments must be continued through the year. April 1st he has a note of $50.00 due at the bank. He pays $30.00 a month rent and his coal bill for the year amounts to $150.00. Personal taxes must be paid May 1st amounting to $15.00. Water tax May 1st, $9.25 and November 1st, $9.25. He saves $25.00 a month, and all of his other living expenses amount to $100.00 a month. His salary is $3,000 a year. Budget the above so that all accounts due may be paid promptly at maturity without interfering with the regular monthly household expenditures.

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CHAPTER XXIII

THE PROBLEM OF SERVICE IN THE HOME

In the making of family budgets and in the consideration of sehold efficiency the problem of service must not be overlooked. here is one factor in the expenditure of a household that may tly be classified among the items that make up the cost of *high ng* it is often that of service. This chapter, however, is only cerned with the financial aspects of this question. It has per- s been thoroughly discussed from every other angle, although h discussion has not resulted in its efficient organization as industry. Since the European War interfered with the tide of migration and opened up many high-paid positions, the shortage girls available for housework makes every phase of the problem re acute than ever before.

From the financial standpoint we need not concern ourselves h the servant-girl problem in the families of the well-to-do, al- ugh in the homes of the wealthly it is a vital factor. The spe- lization, however, required of help in such establishments has ught about a more special class of trained help than that re- red in the average home, so that their service question becomes entirely different problem from that which confronts the family average means, and at this time it is only the latter class in ich we are interested.

The Evolution of the Maid.—There was a time when "serv- -girl" was a good enough appellation to be used by both mistress l employee. In the rural communities she was known as the lp" or the "hired girl," but in town the term "servant-girl" was listinction appreciated by both mistress and maid. The family t could afford a "servant" certainly represented the aristocracy community.

Long before the wave of "high living" set in, both terms began acquire an opprobrium they did not deserve, and so, in time, "hired-girl" developed into a "servant-girl," and finally into a aid," and with the change of appellation came a renewed de- d for her services. Women who never before felt the need of services as "hired-girl" or "servant" suddenly discovered a vital

necessity for a "maid." The family who had felt no cause pride in the possession of "help" at once discovered that a "ma contributed a certain prestige never before enjoyed.

When the "hired-girl" became a "maid" the accolade confer upon her by her mistress in the form of a cap and apron at o raised her own social status, and as the mistress thereby gaine new prestige the maid also demanded an equivalent in the fc of increased wages, besides the honorarium of many special privile never before enjoyed.

How a Maid Raises the Standard of Living.—The num of girls eligible at first for graduation from the "servant-g class into the ranks of the "maids" was, more or less, limit They were able to demand a higher wage than their sisters of pretension, and thus the first step was taken in increasing cost of living.

The second step was brought about by the special privile secured by the "maid." With her cap and apron she refused to many of the harder tasks formerly included in the duties of g eral houseworker, the "hired-girl." Such menial work as the fan washing must now be done by a washerwoman. Soon the care the children began to be too heavy a burden for the maid, an nurse-girl must be secured. In addition to all this, if there w too many in the family, or more than a specified number of roc in the house, a second girl must be secured, and if this were ne sary it also proved the necessity for maintaining a cook. She pr ably asked for a "kitchen-girl," and so from the possession of employee have come many demands and greatly increased exper in the form of service.

When the maid first doffed her cap and apron many a mist felt the necessity for displaying the costumed girl, and so the n meal became a lunch, and then a luncheon, to which, quite quently, guests were invited as to a special occasion; then c the afternoon tea, for what was the use of having a maid if could not be placed upon exhibition? All this meant extra w and increased work called for more help and a greater expendit for the table. The addition of new social customs generally bri with them added expenses and thus one by one they serve to r the standard of living.

The possession of a maid in the average family may bring ab one of two extravagant conditions. In many communities the su-

ciliousness of the maid often shames a mistress into setting a much better table than the family can afford, that she may not appear mean in the eyes of the maid and be reported as "stingy" or "close." So, in food, in clothes, in the general operations of the household and in many little things, the employer raises her standard of living through fear of her maid's tongue.

The other condition exists more in the smaller towns. There Mrs. Smith really cannot afford a maid, but unless she keeps one she loses prestige, and she makes it possible by many petty economies. As there are so many Mrs. Smiths in such communities they do not try to hide such a condition from each other, but even when there is not this dishonesty in ideals of life the retention of the maid must depend upon many petty economies in other parts of the household.

Of course, in the average homes of the middle-class in the cities the maid has lost her novelty and she has become a regular factor to be reckoned with. So many families now possess a maid that she has lost much of her power to add to the social prestige of her mistress, but she has not lost her ability to add to the cost of living.

The Expense of Maintaining "Resident Service."—In addition to the extravagances mentioned in the foregoing paragraphs, and in addition to the wages of any resident employee, must be added board and room. A business man figures his rent as part of the expense of doing business. A maid requires a room and, frequently, a special bath-room, all of which means a larger apartment or house and, therefore, an increase in rent. This room must be furnished, heated and lighted, which means expense. At the very lowest figure one could hardly rent a room equal to that found in the home of a family employing a maid for less than three dollars a week. Bachelor's quarters, consisting of one room and a private bath, in a large city could not be secured for less than from five to seven dollars a week. Figuring it in another way, apartments in the city rent for from ten to fifteen dollars a room per month, including one bath. When two baths are offered the charge is a little in excess of that figure. At the very lowest possible estimate the maid's room and bath cannot be figured at less than $12 a month.

The cost of table board in any decent boarding house is not less than four dollars a week. At this rate the maid's board would be worth not less than $16 a month. The fact that she has access to

the pantry and that she can and does live far better than she could in any good boarding house, and that it costs her mistress more than it would to board her out at boarding house rates, is not taken into consideration.

Seven dollars a week is the average wages of a maid in the cities. It will run from five dollars to nine dollars. At seven dollars, a month of four weeks makes her wages $28. To this add $12 for room and $16 for board and we have $56 per month.

Business men figure from ten to twenty per cent. for depreciation of their stock and plant. Tools wear out and are broken. Goods are often stolen and the losses must be accounted for and deducted from the inventory at the end of the year. Housewives' experiences have given rise to some pertinent quotations, as "A maid eats her wages, wastes her wages and breaks her wages." While this may not be universally true, the loss to the family through the carelessness of a maid, including wastage, the entertainment of kitchen friends, the breakage of china and glassware, and the excess cost not already figured would not be less than ten per cent. Let us see then exactly what such a maid is costing the average family:

Wages at $7.00 a week, per month	$28.00
Room and bath, per month	12.00
Board at $4.00 a week, per month	16.00
Depreciations (waste, breakage, etc.) 10 per cent. on above $56	5.60
Total cost per month	$61.60

The total yearly expense would be $61.60 × 12 or $739.20.

Many a family having an income of only two thousand dollars a year is maintaining the services of a maid, and yet $739.20 a year *is more than thirty-six per cent. of the entire income.* This is considerably more than most of the economists allow for rent and clothes.

In the above estimate nothing has been allowed for gifts or benefactions during periods of sickness or misfortune liable to come to any maid, and nothing has been allowed for extra food and other costs caused by the unconscious shift in the whole scale of expenditure, due to the fact that "We have a maid now."

When Should a Maid be Employed.—During the advent of children into the family any woman is entitled to the services of a maid, even though the family income be limited. Economies may be made in other directions, which would be perfectly justified

such conditions. If the mother is an invalid or during
s of extended sickness in the family, a maid may be justified
less of expense and at the risk of entailing indebtedness for
mporary help. If a real necessity for help exists, and if
ncies require it, almost any sacrifice on the wage-earner's
ould be made to provide for it. Otherwise, no family having
ome of less than three thousand dollars a year has any right
normal conditions to maintain a maid.

woman has a right to rest and to reasonable recreation,
is only when the physical demands of the household become
than her ability to care for them that a wife and mother
tled to assistance, unless, of course, money is no object.
f course, does not apply to the household where, for legitimate
, the wife desires to become a wage-earner outside of the
It is the normal problem whose solution we are seeking.

nen a Maid Should Not be Necessary.—If the husband
all of the work of his office why should he engage an assist-
less he can utilize his time to better advantage in some one
f his business. It is only when he can do this, or when the
ncreases beyond his personal ability to keep up with it, that
nce is demanded by the business man. He is never given an
nt simply that he may have more time to read the papers,
ek recreation, or even to cut down his hours of toil.

e woman of the home has no more economic right to hours
are or of recreation than has the husband. It is true that
ssible for the woman so to arrange her work that she can
half-hour's rest once or twice during the day, and perhaps
hours for social activities, opportunities that never come to
siness man during business hours. On the other hand, the
sibilities of her position are not over at the end of the
or the tenth hour of work. She cannot lock the door on
s her husband can on his business demands. In general, how-
husband and wife should so arrange their work that their
ion may be taken together, if it is at all possible. With
fe and mother the work of the home comes before church
or social activities, as does the work of men in business,
ese activities should not be indulged in under ordinary cir-
nces if they entail the necessity for keeping a maid.

der a three thousand dollar a year income the average woman
mal health, and surrounded by normal family conditions,

should be willing and able to do all but the heaviest work of the household. If the possession of a maid leaves the woman of the household with nothing to do but to read, make calls, receive, attend bridge parties and matinees, she has no moral right to accept assistance in doing the work of the house. If the possession of a maid makes it possible for the mother and wife to sew and make the dresses that otherwise would have to be purchased, or to do other productive work which entails no loss to family life, there may be justification for the employment of help.

When there are no children, or after the children are grown, if the income allows, the choice of the wife may decide whether she will use her energies in running the house or in working for the public welfare, for which the experienced homemaker is eminently fitted.

Household Slackers.—If the American woman of average means would banish from her mind the social status of her neighbors, if she would cease to care what they may think or say, and recognize that housework and home duties are not degrading, the problem of living might be greatly simplified for all concerned. In the social circle of the family having a three thousand dollar a year income a maid should be the exception. As it is, she often exists that she may give tone to the family and that she may add social prestige. A woman of fair health who cannot take entire charge of a family of three children with herself and husband in a small house or in a modern apartment with all of its conveniences without the aid of maid or servant is not bearing her share of the economic problem. She is a shirker and a "slacker." These are plain words and few women keeping "help" will agree with them, perhaps, but they are true, nevertheless. When she considers herself the *protégée* of her husband and entitled to fine clothes, freedom from work and anxiety and the heir to nothing but a good time, that is one proposition; but if she is to be a real wife and helpmate and mother, then the work of the home comes first. The husband may say he does not want his wife to do "this" or "that" and that he wants her to take her proper place in the social life of the community; but if his income is not considerably more than that already mentioned he has no right to force his wife to become a parasite and he has no right to possess a wife who is not competent to meet the only condition he is able to provide and to do justice to himself and the future of his family. On the other hand, he must be as

y to furnish her with the appropriate labor-saving devices as he
d to furnish them for himself.

The absurdity of keeping a maid in a four- or five-room apart-
t in which the children must be forced to sleep upon couches
ving rooms, in order to provide a room for the maid, should
pparent. The writer knows of one family that occupied a house
eight rooms for which they paid sixty-five dollars a month
l. They kept a cook, a so-called butler, a nurse-girl and a
. The family consisted of father, mother and two small chil-
. Could anything be more inconsistent?

even hundred dollars a year is the average, if not the mini-
expenditure, required to support the services of one maid in
ity of to-day. Interest on this sum is forty-two dollars a year
x per cent. If we add this interest charge, which would be
) per month, to the total monthly expense of $61.60, already
ioned, the total monthly bill would be $65.10. Can the wage-
r afford it? Is the service to the housekeeper worth it? Would
nyone be greatly excited over a prospective wage increase of
five dollars a month? Could not that sixty-five dollars give
abundant life to the family if spent in some other way?

The sad part of this question of increased living expenses is the
that, in the majority of instances, the maintenance of a maid
e average family is unnecessary, absolutely uncalled for and
lection upon the ability and the industry of the so-called
ly of the house."

oubtless, many a woman who will read this and who is not
t with herself will call this destructive criticism. If so, are
willing to admit that you expect to be more of a drone than
husband? Do you claim that because of your sex you are
ed to more recreation and a greater indulgence in freedom
work than the father of your children? If so, and if your
ntion is correct, then our entire economic life has been based
a fallacy, and we should begin all over again and erect a struc-
suitable to the foundation you have planned.

the foregoing suggestions have not given a sufficient hint
why any healthy woman under normal conditions should dis-
with the services of a maid, the following additional factors
d be considered:

he Relation of Children to the Work of the Home.—It is
ightful heritage of children to be taught how to work. It is

their right to demand that they be prepared for the making of their own homes later in life. We hear much about the necessity of the schools preparing young people for real life, but how much do we hear about preparing boys and girls in the home to become home-makers? The mother who has not taught her own girls to care for themselves and their surroundings, to sew and to cook, has robbed her children of that which is far more precious than social position, and far more important than anything that can be offered by the most fashionable preparatory school. That mother has actually robbed her daughter of part of her character training and of her economic independence. To that extent she has helped to lower the future standard of living of her daughter.

If there are children in the family and if they have passed the age of five or six, then there should be less, rather than more, need for the services of a maid. In these days we hear young girls rebelling against being a "K. M.," or "kitchen mechanic," when asked to wash a few dishes. "Clara Smith doesn't have to do that kind of work. The Smiths keep a maid," the mother is told, and so, in order to live up to the Smith standard of living, the Joneses must also have a maid, or mother must do all the work without the aid of daughter's lily-white hands. It makes no difference that the Smiths have a ten thousand dollar a year income and the Joneses three thousand dollars.

The very best opportunity for dispensing with outside service is that presented by the family with children. The girls simply must be taught to sweep and dust, and wash and wipe dishes, and to cook and to sew. Boys, too, should be enlisted in as much of the work of the house as is possible. Boys should be taught to care for their own clothing. They should look after their own linen and prepare it for the laundry; black boots as necessary; clean walks, and care for the furnace, if such burdens fall upon the family; to make their own beds and care for their own rooms as do the cadets at the United States Military Academy, at West Point. They should know simple cookery, sewing and the requirements of food and sanitation.

The Family a Co-operative Working Unit.—Every member of the family should form definite habits of order—to put back in their proper places clothing, books and tools that have been used, thus reducing to a minimum the daily task of setting the house to rights.

husband should co-operate, by example, in this character
g, take a share in planning expenditures and in keeping
. He should assume part of the responsibility for the mar-
and when the wife has tasks beyond her strength, and means
available for hiring assistance, he should give some of his
ime to a share of the housework.
family should be run on a co-operative basis and each one,
girl, should be taught that he or she has a very definite part
work to perform. A strong boy of ten is not going to grow
h much respect for the dignity of womanhood when he is
to spend all his leisure time in play while mother, sister, or
e hired maid, is emptying ashes, making fires, mopping floors
ng work that he might well be doing. These conditions were
y unknown, and they cannot continue to prevail if we would
the normal family life that hardly exists to-day in the
The first great step then in reducing expenses and in doing
paid service is to enlist the aid of children, if there are
d of all adults in the family. There are to-day many women
g an income of twenty-five hundred dollars, or more a year,
ve found a way out and who are doing their own work either
e aid of children and husband, or in other ways.

angement of the House a Factor in Reducing Work.—stematic arrangement of the house, which has already been ed (Chap. XXI), is effective, of course, in directly reducing nd the necessity for hired service; and it will help make it for the home woman to do her own work, except the heaviest ghest parts. Let all surfaces be reasonably smooth and easily le. Have no unnecessary furnishings too heavy to move, king up space and requiring care. Arrange the furnishings processes of daily work so that steps and all movements may ced to the minimum.

se fundamental rules are being considered more to-day than fore. Materials and colors are chosen that will not unneces-how dirt, thus requiring constant cleaning. Prevention is g, as it should, much of the study that removal has previ-equired.

hitects are providing vestibules where shoes may be cleaned, rshoes, wet umbrellas and dripping raincoats stored. Built-ves, bookcases, cupboards, seats and mirrors help to reduce or and expense of cleaning processes. Rugs have taken the

place of carpets. Coal- and wood-cooking stoves have given way gas and electric apparatus, and steam and hot-water systems h replaced dust-creating hot-air furnaces. Screens and cleanness a abolishing flies, thereby saving labor and renovation costs. T proper design of every part of the house which is involved in t work of the home reduces the labor involved in its care.

Labor-Saving Equipment.—In addition to the arrangemer of the house, the labor-saving equipment should command seriou consideration in studying the service problem. The chapters o Household Equipment and Electricity should be considered in thi connection.

Part-time or Non-resident Help.—If all these things have not done away with the necessity for help, then one may resort to non-resident or part-time help. A woman can be secured to come in once a week to do the family washing and ironing. She will also have time to mop up the kitchen and the bath-room.

Once in two weeks a woman can come in to clean up the entire house. The mother or the children can take care of it in the meantime with the vacuum cleaner.

In many communities girls can be had to come in for one or two hours during the day. In such ways, board and room is saved. In a few communities girls from high school classes in domestic science are occasionally available out of school hours to do this part-time work, thus providing a good type of service and helping to inculcate in the whole community sane ideas regarding the dignity of housework.

While, with part-time help, room and partial board is saved, one must expect to pay higher for a worker who rooms and boards herself and for lost time between jobs.

In some cities, at present, all the work of the house is done daily by part-time workers, who are employed on a regular business basis of two or more shifts.

In New York city one who has tried this method says, " cost me actually four dollars a week more in wages at twenty-f cents an hour and reduces my household service exactly forty-n per cent."[1]

What Constitutes a Fair Day's Work for the House and Maid?—In home life we have the sweated housewife as as the slacker. From daylight until dark, and perhaps long others are at rest, many a housewife toils unceasingly. The

[1] *Housewives' Magazine*, May, 1918, p. 14.

true of the maid. There are no hours of rest in many homes the maid, except the weekly afternoon off. The farmer finds hard to secure and to keep a steady supply of labor, principally ause of the unusual hours of labor expected of a farm-hand, l, for the same reason, perhaps, the housewife may find it harder ry year to secure competent girls who are willing to work on a edule of unrestricted hours.

Of course, it is not practical to think of the time-clock in con- tion with either house or farm-work, and neither may it be sible to say that the work of the day shall start at seven and l with the six o'clock whistle, but it is reasonable to establish r limits for a day's work, whether on the farm or in the home.

An attempt should be made to urge every woman, as well as ry man, to do his share of the world's work. The parasitic man, as well as the idle, sycophant man, should have no standing any community, but, on the other hand, relief should be found the woman whose work never seems to be done.

An Eight-hour Day for Home Workers.—The ideal of the ht-hour day of real productive work may be feasible for the ne and the farm, as well as for the store and shop. The problem the home is a different one from that of the commercial world. he home requires work early in the day, and in the evening when er toilers are taking their rest. Because of this, it must be made sible to assign definite rest hours during the afternoon. The nediate problem is two-fold: to secure a full work-day for those nen who have too much leisure and are really slackers, and to en the work of the sweated housewife.

If the woman of the house does her own work, and she cannot mplish that work within an eight-hour period, this may form basis for a legitimate demand for assistance, if the finances of family justify the expenditure.

If the work of the home cannot be accomplished by a maid hin an eight-hour period per day her work should be supple- nted by some member of the family. More reasonable hours of k must be recognized within the home as one factor in the solu- n of the household service problem.

Domestic Service a Trade.—Domestic service should be gnized as a trade, and there should be nothing to fear from ultimate unionization of that trade. Such service should de- nd proper preparation and training on the part of those who

enter it; a certain standard of intelligence should be required, and the same moral virtues demanded that are requisites in any walk of life. The ear-marks of servility must be removed from house-work. All this, however, cannot be accomplished unless reasonable hours of service are recognized.

A definite attempt to bring about these conditions should result in a trained group of workers. Wages should be graded according to skill. The terms "employer and employee" must be substituted for "mistress and servant." The duties and schedules of work of the household must be standardized, and the legal relation of employee and employer must be determined, as it is being determined in other lines of work.

Efficiency Demanded of the Home Maker.—Economists say that the present high prices never will recede to their former level. Efficiency in business is demanded of every man, and an equal efficiency should be demanded of every woman. The European situation promises to cut off for many years to come the supply of immigrant girls willing to do housework. The independence and the aristocracy of mind acquired or inborn in every American citizen will more than ever prevent our native girls from accepting positions that bear the ear-marks of servility. The earning power of the majority of men is becoming more and more limited. There are more and greater opportunities for the few and less chances for the average man. All this means that even the well-to-do will find it difficult to secure help in the work of the house, other than that offered by a trained class represented by the serving men and women of Great Britain, who boast that they were born in service and that they expect to die in service. It means that the woman of even more than ordinary means is choosing to do her own work, as was formerly the custom, a condition that promises much for the future welfare of the home.

There is no greater leak in the home finances of to-day than that through the medium of hired service. The first step in reducing the cost of living must come about through banishing false pride and false standards. This may result in the discharge of every maid in every normal home not enjoying an income of more than three thousand dollars a year. How many wives will have the courage to take this step before being forced to it? Tradition, convention, custom, false pride, Mrs. Grundy, selfishness and laziness are a few of the factors that have made service seem necessary

in many homes. Domestic service tends both to living on a more extravagant scale, or "high living," as it has been called, and to waste and carelessness which still further increases the costs of living.

QUESTIONS AND PROBLEMS

Is a woman any more entitled to assistance in the work of the home than is the man in the work of his office, store or factory?

Suppose an American family in average financial circumstances. There are two or three children in this family. The wife is in good health. The family washing is done by a laundress who cleans the house thoroughly every two weeks and does a certain amount of cleaning once a week. The mother is able to do all the other work of the house, besides a little sewing. By proper management she finds time for an occasional afternoon's recreation. She does not, however, have the time to give to club work. She cannot keep up with social activities, attend frequent matinees or indulge in much leisure for reading, walking or riding. Is she justified in keeping a maid?

If the family income were sufficient to meet this added expense without hardship, if the wife can do the work without its being a tax upon her health, should the maid be employed or the cost of her services added to the savings account, or some luxury be secured for the home?

What are the expenses connected with keeping a maid other than wages?

For what wages may a competent maid be secured?

Should children be made to do work of the house usually done by the mother or by a maid? All of it? What parts of it?

Should boys be taught to do household work? What part?

How may the arrangement of a house help to reduce the labor of the home?

In what way may certain devices reduce the amount of work in the home?

How may part-time service reduce the cost of living?

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PART III.

FACTORS IN THE FAMILY BUDGET—HIGHER LIFE

CHAPTER XXIV

LIFE, ACCIDENT, AND HEALTH INSURANCE

INSURANCE should be considered as important a factor as any other aid in the household budget. It often makes possible the education of children, the holding together of the family, and the retention of the homestead after the main wage-earner has been incapacitated or taken by death.

The business of insurance has grown to enormous proportions, and the assets of the insurance companies are so great that their misuse might easily disturb the finances of the entire country, as well as endanger the interests of millions of policy-holders. At one time some abuses existed in connection with insurance, but laws were finally passed in various states to safeguard policy-holders so that to-day insurance companies are usually under the supervision of the state and subject to examination by state officials. Inquiry may be made, for example, in the State Insurance Office of your state capitol for information regarding any company in which you are interested.

There are several distinct classes of insurance, and it will be well to consider each of them. A few terms need to be explained.

Policies and Premiums.—These terms, as in Fire Insurance (p. 187), refer respectively to the contract made between an insurance company and the insured, and to the amount to be paid at certain intervals by the insured in return for the benefits guaranteed to him as the holder of an insurance policy.

Beneficiary.—A beneficiary is one directly benefited in some way by another. In an insurance policy the beneficiary is any one to whom payment is to be made by an insurance company in the event of loss covered by the policy. The beneficiary in some policies may be the person paying for the insurance, as in health insurance;

it may be some other person, as a man's wife, who is often named as beneficiary, for example, in his life insurance policy.

Accident Insurance.—The name of this type of insurance is self-explanatory. In case of accident a stipulated sum is usually paid to the injured party, according to the nature of the injury sustained. For instance, the loss of one or both eyes, of one or both hands or feet, call for specific indemnities. If death results from the accident a total sum is paid to the beneficiary or to the heirs. In many companies this sum is five thousand dollars. Others base their policies upon a one or two thousand dollar death benefit.

Double Indemnities and Miscellaneous Benefits.—Some accident insurance policies provide for paying twice the amount of the indemnity if the accident occurs while riding on any public conveyance, such as a railroad, an electric or street car line, a boat or an elevator.

Many companies provide a sum of one hundred dollars to be expended, if necessary, in the temporary care of the insured when injured, and in conveying the injured party to his home. They also provide a certain weekly indemnity to be paid for a specific number of weeks during which time the insured may be incapacitated. In some cases the sum is paid during the time of total disability, providing such time does not exceed a certain number of weeks. Again, if total disability is removed and the insured is able to work part time, partial disability, that is, a reduced payment, is allowed for a limited time.

As an illustration, an accident may confine one to the house for five weeks, during which time total disability would be allowed. During the next five weeks the insured may be able to work half a day, and for that period he might be allowed half the amount.

Some accident policies provide a certain sum for surgeon's fees in case an operation is necessary. For instance, a small sum might be provided for a minor operation and a larger sum for a major, or serious operation.

The cheapest form of accident insurance is that provided by associations formed for the protection of travelers. Policies in such companies cost about nine dollars a year, and they provide for a five thousand dollar death benefit. Following are the benefits allowed by most travelers' accident associations:

Loss of one eye, one foot, or one hand, $1250; loss of both eyes, both feet, or both hands, $5000. Weekly indemnity, if disabled

through an accident and unable to work, $25 per week for 104 weeks. Weekly indemnity, if only partially disabled through an accident and able to work part-time, $12.50 a week for five weeks. Usually no indemnity is paid for disability or partial disability for the first week or ten days, but if disability continues beyond that period indemnity is allowed. In case of death through accident, $500 will be paid to the beneficiary or to the deceased's heirs. In most travelers' accident insurance associations if death results from accident while riding in a passenger coach, on an exclusively passenger train propelled by steam, or by electricity in terminals, the death benefit is doubled, making the amount $10,000, instead of $5000. Such accident associations, although founded for the benefit of commercial travelers, usually will admit a person who travels during the year in pursuit of any business.

Statistics prove that fewer accidents happen on public conveyances than in the home and on the street. The argument that one should not carry accident insurance because he does not travel is a poor one. There is more danger in crossing the streets of a large city than in traveling a thousand miles on a train. Every head of a family should carry accident insurance.

Health Insurance.—Health insurance is operated on the same basis as accident insurance, a weekly indemnity being paid the insured during illness, the indemnity running for a limited number of weeks. No indemnity is usually paid for the first week of sickness, and a doctor's certificate is always required both in health as well as in accident insurance before an indemnity is paid. Some policies combine both a health and an accident clause, providing indemnity in case of either sickness or accident.

Casualty or Employer's Insurance.—Many accidents have occurred to employees through the negligence of employers. A dangerous machine should be safeguarded for the employee by some attachment that will make an accident well-nigh impossible. Frequent accidents to workmen have resulted in many suits against employers on the ground of negligence. Often, dishonest employees took advantage of the situation to sue an employer unjustly, and so insurance companies began to write "Casualty or Employer's Liability Insurance Policies." In such insurance the employer paid a lump sum to the insurance company, and, under the terms of this policy, if any employee were injured the insurance company settled with the employee after investigating the claim, but if the claim seemed

udulent the insurance company would fight it at its own expense ough the courts. About half the premiums of such insurance nt for expenses and did not benefit the employees.

Since this form of insurance came into existence many laws e been passed by the various states, and also by the Federal gov- ment, providing for the compulsory insurance of workers by em- yers against injuries sustained while at work, providing such uries have not been intentionally caused by the employee, or have occurred while the employee was intoxicated or grossly negligent. der these new laws, in most states, if a wage-earner is injured ile at work, he or his family receives an insurance benefit.

The importance of these Industrial Accident Compensation ws in safeguarding the budget of wage-earning families cannot over-estimated, since there are 30,000 fatal industrial acci- nts a year in America, and several times that many minor acci- nts which temporarily incapacitate for earning.

Although not expressly stated in the law itself, court rulings uld indicate that under the Accident Compensation Laws, where ry form of occupation and service is covered by these laws, a id in service might hold her mistress liable for injury sustained ile in service. These laws in most states, however, unfairly ex- de domestic employees from their benefits. Some companies offer olicy which covers all liabilities for accident that may come upon householder, the premium of which is $10 a year. Those hiring rkers in or about the house should ascertain their legal position relation to possible accidents to employees.

Life Insurance.—There are two main types of life insurance, t furnished by fraternal or assessment associations, which collect essments from members to pay policies upon deaths of members they occur; and the reserve or "old line" companies, which collect miums varying with the age at which the person takes out his urance, but large enough to build up reserve funds in advance, m which, with current premiums collected, the policies are later d.

Fraternal or Assessment Insurance.—Assessment insurance sists of insurance paid from assessments levied upon the mem- s of an association. A certain amount is collected from the mem- s in the form of dues with which they pay the operating ex- ses of the association; and upon the death of a member an as- sment of a certain sum is levied upon each member with which

to pay the face of the policy matured through the death of this member. The policies in such organizations are usually written for one uniform amount, say two thousand dollars, although some provide for a one, a two, and a three thousand dollar policy.

As a basis for determining the cost of assessment insurance the following figures have been obtained from the "Modern Woodmen of America," covering a period of twenty-four years. These represent the *mortuary* payments made by a member who joined the society at the age of 21, January 1, 1893: $4.40 a year, from 1893 to 1896; $4, 1897-99; $4.40, 1900; $4.80, 1901; $4.40, 1902; $4.80, 1903; $4, 1904; $4.50, 1905-07; $4, 1908; $5, 1909-10; $5.50, 1911; $6, 1912-16; a total for twenty-four mortuary payments of $115. In addition to this, $1 per capita per annum was collected from 1893 to 1909, and since 1909, $1.20 per annum, or a total of $25.40. There were also local camp or lodge dues, which varied from $1 to $2 a year, so that, striking an average of $1.50 a year, they would amount to $36 for the entire period.

The total cost of this $1000 assessment insurance for twenty-four years shows as follows:

Mortuary payments 24 years	$115.00
Lodge dues (averaged), 24 years	36.00
Per capita tax, 24 years	25.40
Total cost of this assessment insurance for 24 years...	$176.40

Average annual cost, $176.40 ÷ 24 = $7.30.

As an illustration of the workings of such organizations, it can be seen readily that for every 1001 members in the association, with the policy written for two thousand dollars, the death of a member means an assessment of two dollars from each surviving member.

The danger involved in this kind of insurance lies in the fact that the members of the association are constantly growing older, and, therefore, the death rate must increase. If no new members were secured it would be but a short time before such an association would go out of business, because, as the death rate increases, and the membership grows smaller and smaller, the amount of the assessment necessary to make up the face of a policy must become larger and larger. As an illustration, if there are only five hundred members left, it would take an assessment of four dollars from each member to pay one two-thousand dollar death claim. If ten deaths occurred in the year, the amount to be paid for death losses would be twenty thousand dollars, and if there were only five hun

embers left to pay this loss, each member would have to pay
ssment of forty dollars for the year.
he members in such an association become older it is harder
re new members, especially among young men whose ex-
y of life is much greater than that of the members, and it
by the addition of new members that these associations can
e to exist on such a basis. None of such associations has
le to keep down the average age of the members by acces-
f new members. In some instances, assessments have ad-
from nine dollars a year to over sixty dollars a year, but
course, would cover a period of thirty or forty years.

d Line" Companies Inimical.—Naturally, all "old line"
ce companies are opposed to assessment associations, because
nnot compete with the rates offered by the assessment asso-
s. It is important to note that the two companies sell a
t contract, however. The "old line" companies have in their
ertain sound economic laws and mathematical facts, which
he fallacy of assessment insurance as a stable and *permanent*
f insurance, and as the only kind upon which to rely. If new
annot be added constantly to assessment organizations, and
death rate increases, as it must, with corresponding losses,
mathematical fact that it will be only a matter of time before
essments become prohibitive and the association defunct. In
case, surviving members have probably reached an age, or
of health, that prevents them from being eligible for re-insur-
any other company, or if they are acceptable, age makes the
m almost prohibitive. As a consequence, old age may find
hout any form of insurance and in a position in which it is
ible to re-insure.

combat this situation assessment associations are gradually
izing upon a safer basis by charging larger premiums, which
ith the age of the applicant, thus providing *a reserve fund*
which to pay losses when the old plan of uniform assess-
would have proved insufficient. By paying a higher premium
ier years one is guarded against excessive premiums later.
s a step in the right direction—it really means that the
ent companies have measurably adopted the reserve plans
"old line" companies, but it involves a considerable increase
rates and full provision for increasing losses has not been

0

The entire experience in the life insurance field is decidedly against assessment insurance on the old plan of a uniform assessment for persons of all ages; this is evidenced from the fact that among three or four hundred organizations which were in existence twenty-five years ago not more than a score are still operating, at least, on the original assessment plan. With life insurance, the degree of risk and hence that of insuring increases practically from day to day after a policy is issued; the assessment company meets this by increasing the assessment as the years go by, but in old age this natural cost is prohibitive and insurance must be given up; the old line company meets it by charging a larger premium from the first, enough on the average to meet the cost throughout the years, and what is paid extra in the early years is kept as a "reserve" to pay part of the cost in later years.

A Real Value in Assessment Insurance.—There is one phase of assessment insurance that is not generally recognized by its competitors, and this is that one secures full value received for each payment made, in the way of protection, for a certain specific time, and at a rate claimed to be less than that charged by "old line" companies. In other words, one pays for that which is received, and no more, at the time the payment is made. As before stated, the real danger of such insurance lies in the fact that its termination, through any cause, may leave one without any insurance, and perhaps in a physical or financial position that would make re-insurance impossible. Assessment insurance should not be one's sole reliance—if one can be further protected by an additional policy in an "old line" company, so that in case of emergency he will not be without any insurance, then assessment insurance may be an excellent investment.

Women's Fraternal Auxiliaries.—Most fraternal insurance organizations are organized as lodges, planned on the basis of other secret societies These organizations usually support auxiliary benefit associations for both men and women. They afford women the opportunity of securing cheap insurance, sometimes including health and accident, as well as life policies.

Legal Reserve Life Insurance Companies.—A "legal reserve" company is one which bases its premium upon the facts of some mortality table, which collects as premiums and sets aside in the earlier years of the policy sufficient funds to care for the increased cost of the insurance when the insured reaches advanced age—the

theory being that should a legal reserve company discontinue writing life insurance at any time, the legal reserve accumulated from earlier premiums plus future premiums from the policy-holder would be exactly sufficient to pay every claim until the last man died, without increase in the number or amount of premium payments. The legal reserve system enables a life insurance company to carry out its contracts by charging a uniform or "level" premium determined in advance, which does not change through the years. The premium is more than the cost of the insurance in earlier years, and this excess is carried over as a reserve by the company to later years when the insurance in any year costs more than the premium of that year. If any part of a premium remains after the death losses are paid and the reserve established, it is, in mutual companies, in one of several ways returned to the policy-holder.

"Expectancy" of Life.—Premiums are not based upon deaths as they actually occur, but upon the probable "expectancy" of length of time an individual may be expected to live after attaining a certain age. By collecting statistics, covering many years, and embracing many thousands of individuals of all ages, statisticians have been able to figure with almost mathematical certitude the probable length of time a person will have to live after attaining a certain age. The premium then is based upon the age of the insured at the time insurance is applied for, and it is the same for every one of the same sex *and of the same age.* The premium first charged the insured is stable, in that it remains the same during each year of the life of the insured, except in mutual organizations as above stated. The statistics referred to are called "mortality tables," and such a table is shown on page 307 for reference purposes. In explanation, the first line of this table shows that from a total of 100,000 children of the age of ten years 749 die yearly, and that the remaining number may reasonably expect to live 48.72 years more.

Stock vs. Mutual Companies.—The legal reserve companies are of two general classes—stock and mutual. By stock companies is meant those that are operated on a stock plan—the stockholders have a proprietary interest in the business and are entitled to such profits as may accrue from the business, other than such as they voluntarily may return to the policy-holders as "dividends."

In a mutual company the policy-holders get their insurance pro-

tection at net cost, because there are no stockholders to receive any profit or dividends from the business. Let it be understood that mutual companies, as well as stock companies, must set up and maintain a legal reserve, based scientifically upon some mortality

AMERICAN TABLE OF MORTALITY

Used by insurance companies in computing expectation of life.

Age.	No. living.	No. dying.	Exp't'n of life.	Age.	No. living.	No. dying.	Exp't'n of life.
10	100,000	749	48.72	53	66,797	1,091	18.79
11	99,251	746	48.08	54	65,706	1,143	18.09
12	98,505	743	47.45	55	64,563	1,199	17.40
13	97,762	740	46.80	56	63,364	1,200	16.72
14	97,022	737	46.16	57	62,104	1,325	16.05
15	96,285	735	45.50	58	60,779	1,394	15.39
16	95,550	732	44.85	59	59,385	1,468	14.74
17	94,818	729	44.19	60	57,917	1,546	14.10
18	94,089	727	43.53	61	56,371	1,628	13.47
19	93,362	725	42.87	62	54,743	1,713	12.86
20	92,637	723	42.20	63	53,030	1,800	12.26
21	91,914	722	41.53	64	51,230	1,889	11.67
22	91,192	721	40.85	65	49,341	1,980	11.10
23	90,471	720	40.17	66	47,361	2,070	10.54
24	89,751	719	39.49	67	45,291	2,158	10.00
25	89,032	718	38.81	68	43,133	2,243	9.47
26	88,314	718	38.12	69	40,890	2,321	8.91
27	87,596	718	37.43	70	38,569	2,391	8.48
28	86,878	718	36.73	71	36,178	2,448	8.00
29	86,160	719	36.03	72	33,730	2,487	7.55
30	85,441	720	35.33	73	31,243	2,505	7.11
31	84,721	721	34.63	74	28,738	2,501	6.68
32	84,000	723	33.92	75	26,237	2,476	6.27
33	83,277	726	33.21	76	23,761	2,431	5.88
34	82,551	729	32.50	77	21,330	2,369	5.49
35	81,822	732	31.78	78	18,961	2,291	5.11
36	81,090	737	31.07	79	16,670	2,196	4.74
37	80,353	742	30.35	80	14,474	2,091	4.39
38	79,611	749	29.62	81	12,383	1,964	4.05
39	78,862	756	28.90	82	10,419	1,816	3.71
40	78,106	765	28.18	83	8,603	1,648	3.39
41	77,341	774	27.45	84	6,955	1,470	3.08
42	76,567	785	26.72	85	5,485	1,292	2.77
43	75,782	797	26.00	86	4,193	1,114	2.47
44	74,985	812	25.27	87	3,079	933	2.18
45	74,173	828	24.54	88	2,146	744	1.91
46	73,345	848	23.81	89	1,402	555	1.66
47	72,497	870	23.08	90	847	385	1.42
48	71,627	896	22.36	91	462	246	1.19
49	70,731	927	21.63	92	216	137	.98
50	69,804	962	20.91	93	79	58	.80
51	68,842	1,001	20.20	94	21	18	.64
52	67,841	1,044	19.49	95	3	3	.50

e and the assumption that the company will earn a certain of interest on all of its invested funds. Nearly all of the r legal reserve companies were organized and are still operated the mutual plan, and there has been a recent tendency for the k life insurance companies to change to the mutual system.

One state, Wisconsin, has undertaken to sell life insurance to citizens, and another state, Massachusetts, has authorized the ual savings banks to sell life insurance—in both cases upon reserve plan and at rates slightly more favorable than those rivate companies.

Kinds of Policies.—Of the policies issued by insurance comies one fundamental distinction is that between "participating" cies or those upon the premium of which the company gives annual return or rebate called a "dividend"; and non-particing policies upon which a fixed premium is charged without uction. The latter are at a slightly lower guaranteed rate; former collect a larger premium but return part of it as the vidend." The tendency is to favor the participating policy. re are four general kinds of insurance contracts: term insure, ordinary life, limited payment life, and endowment.

A Term Insurance Policy furnishes protection for a certain nber of years only. The policy may read five, or ten, or fifteen s, and at the end of the specified period the policy becomes l just like a fire insurance policy. No benefit is paid by such olicy unless death occurs within the period specified; since the of death within such a period is slight for most persons, the of such insurance is low. A person of 30 will pay about $12 ar for a ten-year term policy of $1000, giving protection until ears of age.

Ordinary Life Insurance gives protection for the entire life- of the insured, who pays for it a premium unchanged throughlife. If the insured reaches a considerable age, many modern cies provide that no further premium is paid, say after 70 years age. Such a policy would cost a man of 30 years of age a mium of approximately $20 a year as long as he lives, and will his designated beneficiary $1000 at his death.

Limited Payment Life Insurance gives protection for the entire -time like the "ordinary life," but it requires the payment of a er premium for a definitely limited number of years. For exple, a young man of 30 years of age will pay perhaps $30 a year

for 20 years for $1000 of insurance payable at his death. This would be a "20-payment life policy"—its advantage is that it obviates the financial burden of premiums in old age.

Endowment Life Insurance combines a term's life insurance policy, which would pay a death benefit during its 10-year or 20-year term, with a contract to pay the face of the policy at the end of the period to the insured, if then living. A young man of 30 would pay approximately $45 a year for 20 years for a "20-year endowment policy" of $1000; this would pay $1000 to a beneficiary if the insured dies within 20 years, or $1000 to the insured himself if living at the end of that time. Of the premium paid in the illustration cited, $12 may be considered to be the cost of the term insurance, and $33 to be a deposit which accumulates the endowment.

Annuity Insurance.—This is exactly the reverse of a life insurance contract, in that under life insurance policies the insured pays premiums annually during his life and the company pays a lump sum at death, whereas, in an annuity the policy-holder pays a lump sum in the beginning and the company pays annual instalments back to him during his life. There are several modifications of the latter plan of annuity insurance. It is especially important as a method of wisely using a sum of money available for the support of a person advanced in years; it guarantees against loss of investment and gives the largest possible annual sum as long as the person lives.

Borrowing on an Insurance Policy.—This is a feature which is permitted by all legal reserve companies, but it is discouraged as much as possible, because it is generally conceded that borrowing on a life insurance policy is simply borrowing from one's widow and children, and that if a man has borrowed the equity on his policy he is very likely to allow the policy to lapse rather than pay the interest, and frequently the man who borrows on his policy eventually finds himself without insurance protection.

While this feature is discouraged, the insured has a legal right to borrow his equity at any time. The amount which can be borrowed is stated in the policy, and increases as premiums are paid in year after year. So far as the company is concerned, of course, the amount so loaned is a good asset, because the amount of the loan is always deducted from the face of the policy in event of death of the insured.

Change of Beneficiary.—Under most insurance contracts at present time a person can name as beneficiary any member of family or other person who has an insurable interest in his When taking insurance a person can reserve the right to ıge the beneficiary at will, or can readily insert a clause so that change can be made or no loan secured on the policy without consent of the beneficiary. Under the laws of some states one can be designated as beneficiary, or at least recover under olicy, unless there exists some insurable interest in the life of insured.

The Amount of Insurance an Individual Should Carry.— s depends upon the insurance value of the life to be insured. ossible, one should carry enough insurance so that in the event eath the monetary value of the life should be nearly replaced. instance, theoretically, if a man earns $1500 a year and one- d of that is spent on himself, leaving $1000 for the family, ı $20,000 insurance would not be excessive, because the widow ld be required to invest $20,000 at five per cent. interest to d her $1000 a year. At any rate, life insurance should be re- led as a necessity and should be provided for before indulging uxuries.

From a practical point of view, it would be out of the question a man earning only $1500 a year to pay the premiums on a ,000 insurance policy. Even if such a policy were to be taken at 21 years of age the annual premiums would amount to $400 nore, according to the kind of policy taken. The illustration, ever, serves to bring home the necessity for providing some ıcy for continuing after death, for one's family, the income iously earned.

Term insurance through the years until children are self-sup- ing is a wise plan. Also a combination of legal reserve and ernal insurance may make it possible to carry a larger amount nsurance than otherwise would be possible, and this, combined ı accumulated savings profitably invested, might at least ap- imate the desirable goal of full financial protection.

Insurance for Women.—Nearly all of the "old line" com- ies at this time use about the same premium rates for women as men.

Special Privileges.—After premiums have been paid for three s most insurance companies allow a "cash surrender" value

or refund of a certain sum on the total amount of premiums paid should the insured wish at any time to discontinue this insurance; some policies provide for a special settlement at the end of stated periods. The cash surrender value of a policy is also the sum which one may borrow from the company on the policy. All insurance is now "non-forfeitable" after a period of a year or more; that is, the contract cannot be broken by claims made by either party. If a premium is not paid, thirty days of grace are allowed. Then the policy terminates, but automatically certain adjustments are made; the cash value of the policy is used to "extend" the face of the policy as paid-up insurance for a period depending upon the amount of the cash value; or, if preferred, the extension value is in the nature of a smaller sum of paid-up insurance payable at the death of the insured, whenever that may occur; or, again, if preferred, the cash value will be paid at once to the insured. Terminated insurance may often be reinstated, although a physical examination to prove that the person is insurable may be required. Policies give various privileges also, as to the payment of benefits, such as a lump sum, or an annuity for a term of years, or an annuity for the life-time of a definite beneficiary, and these possibilities should be checked up in a proposed policy.

Insurance of Infants.—A form of insurance taken by some families is not wholly commendable. This is sometimes known as "Baby Insurance," or "Death Insurance." It often begins at birth and calls for a certain sum paid regularly, from five to twenty-five or fifty cents a week. If the baby dies the money is available for the funeral expenses.

In Conclusion.—Every adult should become familiar with the various kinds of insurance. Sample policies should be secured and read over carefully. Most states have insurance commissioners who will furnish information regarding the affairs of the companies doing business in the state. The only thing that will stand in court is the printed or written and signed contract, known as the "policy."

QUESTIONS

1. What are the principal arguments in favor of life insurance? Of accident insurance?
2. What is the basis upon which accident insurance is fixed? Life insurance?
3. What is meant by "legal reserve" or "legal reserve companies"?
4. What is meant by "old line insurance"?
5. What is "assessment" insurance?

6. What is the danger that may result from depending entirely upon assessment insurance?
7. What are some of the benefits of assessment insurance?
8. Should the investment features of "old line insurance" influence one in taking out a policy?
9. What is the difference between "straight" life insurance and ten, twenty, or thirty year payment policies?

PROBLEMS AND DEMONSTRATIONS

1. Procure a statement from an "old line" company showing the cost of a thousand dollar straight life policy for a man 46 years old, and the returns that may be expected upon the policy at maturity.
2. Procure such a statement for a twenty-year payment policy based upon the above data.
3. Secure a statement of the cost and benefits to be derived from a $1000 policy in some assessment association, based upon the above data; such an association not to be on a "legal reserve" plan.
4. Select the form of life insurance that suits you the best and ascertain what it will cost per thousand dollars, and state the benefits to be derived from the policy.
5. John Smith earns $2000 per year. He is able to save out of this, $200 per year and during the course of five years he has accumulated $1000. He desires to take out enough life insurance, so that at his death the interest on the life insurance and the $1000 savings, at 10 per cent., will equal the actual, annual living expenses of his family. How much insurance will he have to take out?
6. If the annual premium on the insurance is $26.80 per thousand, how much will his total insurance cost him per year?
7. What per cent. of John Smith's annual income would be the insurance premium he would have to pay? With his income, could he afford that amount of insurance?

THEMES FOR DEBATE

Resolved:

1. That assessment insurance is economically warranted.
2. That investment should not be considered as an important factor in life insurance.
3. That insurance for women is economically vital.

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CHAPTER XXV

SAVINGS AND METHODS IN SAVING

Everyone should save something, and saving should become a regular, systematic and continuous habit.

"Something" may consist of a dollar a week, or a dollar a month. "Regular" should mean that the same amount during the same time should be saved; at least not less than the minimum amount determined upon. Any habit is systematic, and the habit of saving should not be short-lived and intermittent, but should continue without interruption, through life.

Two Favorable Opportunities in Life to Save.—There are two distinct stages in a man's life when the opportunity for saving is well-timed. This, of course, does not mean that one cannot save at all times. The first opportunity comes in youth before the burden of a family is acquired. Then one's sole care is his own support, and such contributions as he should fairly make to his family. Then a man has an unusual opportunity to save, to make investments, and to lay the basis for an old age fund. Statistics, however, do not show that the unmarried man acquires more, or even as much property, as does the married man. This opportunity comes to the unmarried woman as well as to the man, since she is more and more filling the years between school and marriage with wage-earning employment. During this period of life, both men and women should be saving and making investments and preparing for the future. Such a policy, for one thing, insures a suitable start for a home, when one marries, and if one never marries, it makes the beginning of a competency. With the married man, the maintenance of a home, the coming of children, their education, sickness, misfortune, perhaps death, all contribute to drain his resources. In this day of advancing prices, a man who under such conditions can lay much aside as a reserve, is an exception.

The other opportunity to save comes when children have grown and have left the parental roof as self-supporting individuals, or when they become able to contribute and do contribute to the maintenance of the home.

Two Types of People.—In general, there are two types of

people: those who save and those who do not. Those who do not save, in turn represent two other classes: the improvident, with whom we are not so much concerned, and those who consider the fundamental principles of life of more importance than the acquisition of money and property.

Two Principles.—In starting out in life, every thoughtful couple is confronted with two problems.

The first is the determination to attain success and financial independence. "Some day we must have a competency; some day we must have the best house in town; some day husband must be in business for himself; some day the children will go to college; some day we will tour Europe. In the meantime we must figure very closely. We must plan and economize and deny ourselves."

"Save! save! save!" becomes the slogan of that family.

The second problem involves the principle that life is an art; that it has a purpose; that it is to be lived, to the fullest, every day, as it comes; the most enjoyment possible must be gained, and the greatest good accomplished; that character is more important than money in the bank; that culture is of more worth than gold; that the first consideration *must not be* the acquisition of money, and that saving *must not be* the prime requisite, but that all of these other things must come first. If at the same time money and property can be accumulated, well and good; if not, they must be sacrificed for the former.

Saving as the Prime Requisite.—The great danger from the adoption of the principle which puts savings ahead of other things, lies in the fact that the characteristics necessary to carry the saving plan to its logical conclusion are antagonistic to the development of the higher life. As the habit of saving becomes perfected, and as accumulations grow, pleasure and delight, comfort and appreciation in that which contributes to real culture diminish.

If the monetary standard once fixed as the minimum has been reached, it will be found that the man who saves, now pushes that standard a little higher, and when that new measurement has been reached, it is again thrust upward. The time comes, perhaps, when the largest house in town has been purchased; husband is not only in business for himself, but he is a slave to his business. If the trip to Europe has been taken, anticipated enjoyment has been found lacking because the cultural side of life has been neglected and stunted.

The spending of money, for such, either becomes a vulgar evidence of extravagance or an operation painful to its hoarder. The power to appreciate that which money can buy has been lost. Character has been neglected; culture overlooked and scoffed at; religious principles perhaps lost; friendships banished; family ties loosened, even disposition and health may be ruined. This is the natural tendency of all who pursue the saving habit to the extreme. Death indeed may intervene as it did with the man who would "tear down his barns and build greater" and the whole life-plan founded on saving as its first principle may thus come to naught.

Saving a Secondary Consideration.—Carried to its extreme, the second plan would, perhaps, prove equally disastrous, although in a different way. This plan, which aims at making the things of the "higher life" more important than material things, may involve the danger of slackening effort and of too great a disregard for money itself. A competency is not so liable to be acquired, in which case sickness, misfortune, failure in business, loss and other emergencies prove serious burdens.

The habit of easy spending is apt to be acquired under this plan. Tastes for luxuries that should not be afforded are liable to be cultivated, and a standard of living attained that may result in a desperate effort to make both ends meet. Luxuries easily become seeming necessities, and doing without them then becomes a hardship.

On the other hand, there is much to commend itself in the adoption of the principle, that life is an art and that money is intended to serve, and not to rule. It does seem that a reasonable approximation to both principles might be attained. In so doing, however, one or the other of these two principles must take precedence.

A Golden Mean.—One should realize that the prime purpose of life is not to save money or to acquire this world's goods; but that life means the development of character and the progress of the individual and of those for whom he is responsible. One should learn that the acquisition of money cannot possibly take the place of character, that wealth by no means spells happiness, or even contentment, and that of all the things that make life really worth while, wealth and material possessions are the least, and not the greatest.

If this is true, then the first consideration should be the acqui-si-

tion of that which contributes to the growth of the soul; that which means the upbuilding of character and citizenship; that which means the ever onward march of progress for the individual and for the race. *These things should come first,* and in striving for them, one may know that he is seeking "first the kingdom of God" and should be convinced that all valuable things will be added.

In more materialistic words, the prime requisites are a respectable and suitable environment; a modest home and appropriate home conditions; comfortable clothing; sufficient and nourishing food; a fair education; a reasonable degree of culture—above all, a deep and an abiding faith in the goodness of God and the wisdom of his purposes. These are fundamental for true citizenship, happy marriage relations, proud parenthood and a reasonably happy life.

If after these things have been provided, savings may be accumulated, well and good; but if one must be sacrificed at the expense of the other, let the accumulation of money wait. Having, however, reached a point at which there need be no sacrifice of cultural ideals, definite plans for saving should be formulated and put into practice before luxuries are indulged in.

A Short-sighted Policy.—Many parents take their children from school while still in the "grades" that they may profit from the pitiful wage of their offspring. Statistics show an ultimately great increase in earning capacity for every additional year spent in school. If the parent is inspired by the most selfish motive, the net gain from keeping the child a few more years in school will show a hundred per cent.; a gain that may continue for many years, or so long as the parent is dependent upon the child.

In the greed to save and acquire, the immediate gain is all that is considered by many. The fact that a decent standard of living, a reasonable degree of culture, a happy, broad-gauge disposition, actually count in the ability to earn, is little understood by most people. If character is to be stunted and disposition ruined through the development of miserly habits, then *earning capacity is going to be correspondingly limited.*

"To him that hath shall be given" is a Biblical saying that is daily proved. The liberal spender always seems to have more of this world's goods than the excessively frugal or miserly. Such facts, if facts they are, should not lead to reckless expenditure; but they do prove that the harvest is absolutely dependent upon the discretion used in the sowing of sufficient seed.

The Conclusion of the Whole Matter.—If then one can learn the difference between "abundant living" and luxury; between culture and ignorance; between a reasonable latitude in the matter of expenditure and profligacy, then as soon as possible, the lessons of thrift should be mastered.

Regular and systematic saving, regardless of the amount, should be practiced as soon as possible. A nickel a day, a dollar a week or month, or more if possible, should be laid away, and when a sufficient amount has been accumulated it should be invested and reinvested. If this course is persisted in long enough, a very fair competency will be acquired. The habit formed will indeed be of more value than the actual amount saved, but no habit should

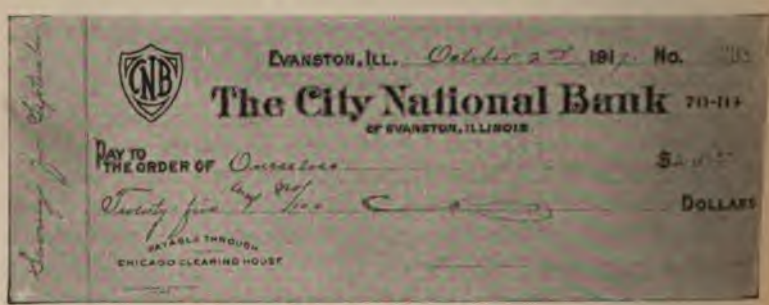

FIG. 39.—A saving check

obtain at the expense of culture. Cultural ideals must not be sacrificed for the acquisition of material luxuries.

Having decided that true saving is a factor in character building; that "Savings" depend largely upon the details of good management in the household such as care in the purchase and utilization of food and other materials, we may now consider certain methods that will introduce system and safety into the questions of household finance.

A Saving System by "Saving Checks."—If the check-book system of paying bills has been adopted, it will be understood that under this plan all money from every source is to be deposited in a joint bank account, subject to the check of either husband or wife without the signature of the other. It is also understood that all bills are to be paid by check and that a certain sum is to be saved from the income every month. Make out a check upon the

bank for the sum, payable to "ourselves" but *do not sign the check* (Fig. 39). Make any notation desired upon the check; be sure and enter it upon the stub of the check-book, and deduct the amount from the balance in the bank as shown on that stub, the same as though it had been made payable to someone else. It should not be signed because it is not to be used, and signed checks should not be left around the house.

Deducting the amount of the check from the balance on the stub prevents one from being tempted to use the money, because the balance in the bank as shown by the stub shows only the amount actually needed for current bills. While you really know that there is to your credit in the bank more money than that shown by the

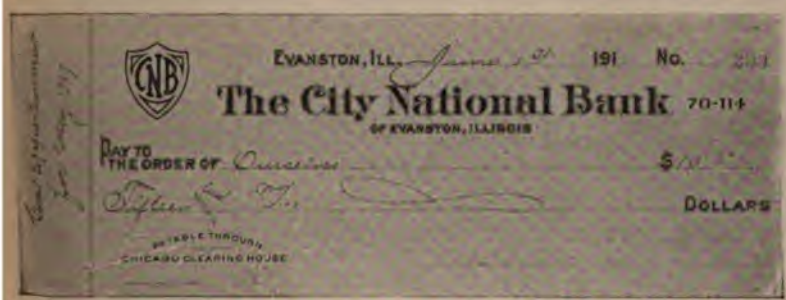

FIG. 40.—Check for coal

stub of the check-book, you do know that *it is not there for current needs.*

Of course, at the end of each month, in checking up the bank account, these "saving checks" that are being held will appear as unpaid and outstanding. In making one's own statement at the end of the month these unpaid checks must be accounted for in order to make the account balance, as the bank statement will show a greater balance than your check-book stub.

In time one comes to forget these checks that are being held and to look upon the balance shown by the stubs as the only available funds with which to pay current expenses, and this prevents the temptation to spend, that a surplus of funds as shown by the balance might induce.

Budget Apportionment Savings Checks.—Sometimes the purchase of clothing, a piece of furniture or some longed-for indul-

gence, or even the payment of a large bill, may require a considerable outlay of cash at a time.

Some apportion a certain amount each month as "extras" with which to meet these expenditures when they become necessary. In other words, a budget system is adopted, as explained in a previous chapter. As an illustration, if the fuel bill amounts to one hundred and eighty dollars a year, the average per month is fifteen dollars. Instead of allowing this expense to come as a burden in the winter months alone, which would mean either the expenditure of this large sum in one cash payment, or perhaps a monthly payment of thirty dollars for at least six months, it is proposed to lay aside the sum of fifteen dollars each month in the year with which to meet this expense. In this way the appor-

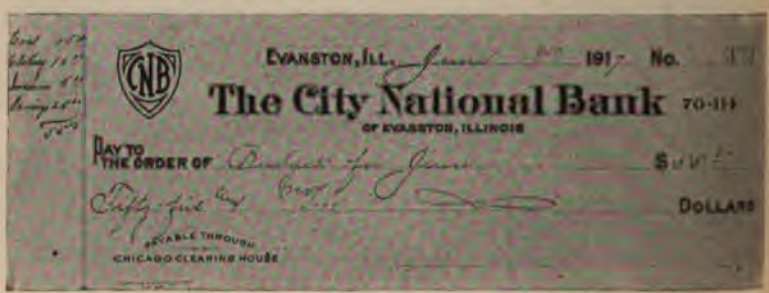

FIG. 41.—Budget check

tionment for the summer months will reduce the strain during the winter months. The question arises as to the best method of caring for these monthly apportionments.

Instead of holding them in cash, make out a check for fifteen dollars, the first of each month, marking it "for coal," as shown by Fig. 40.

Hold such checks the same as the "savings checks," deducting them, of course, from the balance as shown on the stubs. The same plan can be used for all similar apportionments, a separate check being used for "clothing," another for "fuel," and so for other large sums to be met later.

If there are a number of these apportionments to be made each month to cover expenditures during subsequent months, then one check each month for the total of all of them may be drawn, and

dollars *more* than your own check-book stubs will indicate, because you have deducted that amount from your balance on your stubs.

Emergencies come to every family, and it is often necessary to pay unexpected demands which have not been provided for. While one might be able to make up such a payment within the next thirty or sixty days, the immediate payment might be embarrassing, and borrowing might have to be resorted to; but with this method, one would know that the bank balance is really two hundred dollars greater than the balance shown on the check-book stub, and that it would be entirely safe to draw a check with which to pay the unexpected demand. Then as soon as possible the amount so borrowed from an "Apportionment fund" should be returned. Of course, one should not make a practice of borrowing from "Peter to pay Paul," but in emergencies this is perfectly permissible.

Salaried people who receive pay-checks the first of the month, or during the middle of the month, and who desire to pay their bills the first of each month, often find their bank balances inadequate, pending the arrival of the regular pay-check. This is also true when the receipts of rentals have been deferred. With this system, however, one knows that one is holding a sufficient amount of outstanding checks and that it is safe to pay current bills promptly instead of awaiting the arrival of the pay-check or of the deferred rents. When such checks do come, their deposit will equalize the expenditures.

Another advantage of this system lies in the fact that in the course of time the bank account shows an average daily balance of considerable proportions, and this attracts the banker's attention. The banker begins to recognize this depositor as a good customer with possibilities; his credit soon becomes established, and it is not long before he becomes one of the factors with whom every banker reckons. If the savings were kept in a separate savings account in the bank, or if the apportionments were held in cash, the same results would not be accomplished.

It is a good plan at the end of the year to transfer all balances left in the various budget funds, unless held in allotment for some future need, such as fuel, etc., to the savings fund.

Such "Budget apportionment checks" until used can be filed in envelopes, each bearing a description of contents on the outside, or, if there are many series of checks, in an alphabetical file. (See also p. 270.)

Investments.—While the subject of investments cannot be ated here, it should be mentioned in this connection. When one s accumulated several hundred dollars, and there is a sufficient rking capital left in the checking-account at the bank, the surplus ould not be left in the checking-account or even in a savings ount where it draws only three per cent. interest.

The banker should be consulted and his advice secured as to w you may loan this surplus or invest it at a greater return than ree per cent. interest. Money should be kept invested. Merchants ure to "turn" their stock a certain number of times a year; that they expect to buy and resell yearly a certain kind of stock a cer- n number of times. In the same way, one should expect to urn" his money as often as possible, that is invest it as soon as ough is accumulated, and thus secure the advantage of compound erest.

One of the best investments is "real estate" and real estate rtgages, but unless one is very sure of one's ground no in- stment of any kind should be made without consulting a good nker.

Caution.—Do not take the word of friends, relatives or angers in any matter relating to investments, and do not lend ney to them. They may all be honest and sincere but the only dgment one should rely upon in such matters is the advice given a good, honest and practical banker. On the other hand, one ould not borrow from relatives or friends. The business of the nk is to loan money, and one should first avail oneself of what e bank has to offer, before resorting to other sources for loans.

Interest.—Savings Banks usually pay 3 per cent. to 3½ per nt. interest on deposits. From long experience it has been found at banks cannot safely afford to pay more than 3 per cent. 4 per cent. interest at the most on such deposits. One should wary of banks that offer more than 4 per cent. interest.

Banks usually charge 6 per cent. interest on money loaned to stomers for short periods of time. Such loans are usually made r thirty, sixty or ninety days.

Real estate mortgages usually draw from 5 per cent. to 6 per nt. interest, although farm mortgages in western states bring om 8 per cent. to 10 per cent. interest.

Compound interest means interest on interest that has been ded to the original deposit, loan or investment. For instance,

$100 at 3 per cent. interest would earn $3 in a year; at the end of the year the $3 being added to the original amount would mean $103 drawing 3 per cent. interest.

It is hard for one to realize the importance of compound interest. Any sum will double itself in about seventeen years and a half at 4 per cent. interest compounded semi-annually. So great is this power of compound interest that laws in various states prohibit savings banks from paying interest on accounts that have remained undisturbed for certain periods of time; generally twenty years.

What Might Be Saved in Ten Years.—The following table shows the amount that might be saved in ten years if a certain sum was set aside monthly, and invested at 4 per cent., compounded semi-annually:

Monthly saving	With interest would in 10 years amount to:
$2.50	$368.00
4.00	589.00
5.00	736.00
6.00	885.00
7.50	1,106.00
10.00	1,475.00
15.00	2,212.50
20.00	2,950.00

The importance of this subject can hardly be overestimated, as shown by the following tabulation:

ACCUMULATION OF WEEKLY DEPOSITS

OF ONE TO TEN DOLLARS IN ONE TO TEN YEARS, WHEN INTEREST IS COMPOUNDED SEMI-ANNUALLY

At Three Per Cent. Per Annum

Weekly Deposits	1 Year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years
$1.00	52.74	107.06	163.03	220.71	281.13	342.36	405.44	470.47	537.38	60[illegible].37
2.00	105.49	214.17	326.14	441.51	562.38	684.87	811.06	941.08	1,075.05	1,21[illegible].08
3.00	158.24	321.28	489.24	662.31	843.62	1,027.35	1,216.65	1,411.67	1,612.61	1,82[illegible].80
4.00	210.99	428.36	652.32	883.07	1,124.84	1,369.83	1,622.23	1,882.28	2,150.23	2,43[illegible].87
5.00	263.73	535.45	815.40	1,103.84	1,406.04	1,712.30	2,027.81	2,352.86	2,687.79	3,03[illegible].87
6.00	316.49	639.53	972.35	1,318.31	1,680.78	2,048.08	2,426.50	2,816.36	3,218.07	3,63[illegible].96
7.00	369.24	749.67	1,155.61	1,545.44	1,968.53	2,398.20	2,839.96	3,295.53	3,764.49	4,25[illegible].66
8.00	421.99	856.75	1,318.69	1,764.14	2,247.64	2,737.57	3,242.34	3,762.39	4,298.24	4,85[illegible].33
9.00	474.73	963.85	1,485.76	1,986.94	2,530.92	3,082.17	3,650.12	4,235.25	4,838.15	5,46[illegible].32
10.00	527.48	1,070.96	1,630.87	2,207.77	2,812.20	3,424.72	4,055.76	4,705.90	5,375.79	6,07[illegible].98

If money is invested at interest it is only a matter of time before ill double itself. The following table shows for various rates of rest, the length of time required for a sum to double itself:

Rate of interest	Principal will double itself	
Per cent.	At simple interest in years	At compound interest in years
1	100.00	69.66
3	33.33	23.45
3½	28.57	20.15
4	25.00	17.67
5	20.00	14.21
5½	18.18	12.94
6	16.67	11.90
7	14.29	10.24

nterest for Parts of a Year.—Interest on parts of a year at 6 ent. is one-half of one per cent. a month; at other rates, it may gured on the basis of the following table:

Interest	At 3 per cent. a year	At 4 per cent. a year	At 5 per cent. a year	At 8 per cent. a year
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
1 month	¼	⅓	5/12	⅔
2 months	½	⅔	⅚	1⅓
3 months	¾	1	1¼	2
4 months	1	1⅓	1⅔	2⅔
5 months	1¼	1⅔	2 11/12	3⅓
6 months	1½	2	2½	4
7 months	1¾	2⅓	2 11/12	4⅔
8 months	2	2⅔	3⅓	5⅓
9 months	2¼	3	3¾	6
0 months	2½	3⅓	4⅙	6⅔
1 months	2¾	3⅔	4 11/12	7⅓
2 months	3	4	5	8

anker's Partial Payment Bonds.—A comparatively new of saving is being offered by reliable banking institutions ghout the United States, in the form of partial payment s. They offer a certain, definite method of saving. They repre- the obligations of the banks issuing them, and they are pro- d by the resources of the same.

A definite amount is deposited in the bank each month for a

certain number of years, according to the amount of the bond purchased, or the amount desired to save, as follows:

Amount of bond	Amount of monthly payment	Number of monthly payments necessary
$1,000	$3.33	216
1,000	6.96	120
1,000	15.24	60
500	3.48	120
500	7.62	60
250	7.96	30
100	8.17	12

From the above it will be seen that a thousand dollar bond may be acquired in five years, ten years or eighteen years, according to the amount deposited monthly.

If one for any reason wishes to discontinue payments, the full amount paid in will be returned by the bank, and if payments have been made for one year or more, interest on the same will be paid the depositor at the same rate paid by the bank to savings depositors, subject only to any withdrawal notice in accordance with the provisions of the banking law. At the end of the period, or at maturity, the full face of the bond will be paid.

Interest paid on the deposits is compounded, and when the payments have been completed a bonus is added to the total payments and interest, to make up the face value of the bond.

Banks issuing these bonds will loan the full amount paid in upon them at current rates of interest. The value of these bonds lies in their security and in the habits of saving formed in accumulating the face value of the bonds. The fact that the depositor may withdraw his savings at any time, together with the assurance of safety, makes them a very desirable investment for those with little money to invest and without experience in the making of investments.

Liberty Bonds and Thrift Stamps.—These forms of investment are the result of war-time measures and need no explanation here. The student, however, should become familiar with their nature. Information may be obtained from any postmaster or bank. The Thrift Stamps should not be confused with the Postal Savings Stamp explained elsewhere. The Thrift Stamp is not a permanent factor, although it is to be hoped that the Government make it such.

In Conclusion.—Saving should first be systematic, even though the amount saved each week or month be very small. Regular habits of saving count in the long run. Fix a certain proportion of the income to save each month. See that all savings funds are at least drawing interest at 3 per cent. When a sufficient amount has been accumulated, invest it under the advice of some good banker in an investment drawing 5 per cent. or more.

QUESTIONS

1. When does one generally have the best opportunities to save?
2. Name two principles that one may adopt in starting out in life that may have a bearing upon the question of saving?
3. What are the advantages of each? The disadvantages? Is there a "golden mean"?
4. Should one stint one's self of life's necessities in order to save?
5. What should be the prime purpose in saving?
6. Why is regularity necessary to successful saving? System?
7. What is the check-book system of saving?
8. How does the check-book system of saving and of apportioning the budget increase one's capital and balance in the bank?
9. What proportion of one's income do you think one should save?
10. What is compound interest?
11. Why is it not wise to depend upon friends, relatives or "agents" for advice in relation to the investment of money?
12. Who should be consulted in relation to investments?

PROBLEMS AND DEMONSTRATIONS

1. Ascertain from the nearest savings bank the rate of interest paid on savings accounts; from the savings department of a commercial bank.
2. Ascertain from the nearest bank that deals in real estate loans, the amount of interest one might secure on real estate mortgages.
3. Ascertain from the nearest bank the rate of interest charged on small loans for short periods of time.
4. How much would $5.00 a month, saved for twenty years, amount to if invested at 3 per cent. and the interest compounded semi-annually?
5. If $50.00 was deposited in a savings bank, May 10, 1918, what would be the amount of the accumulated interest at 3 per cent. compounded semi-annually on January 1 and July 1 which would be due if the money was left in the bank until July 1, 1919?
6. If you deposit in a savings bank, paying 4 per cent. interest, how much will you have in the bank Jan. 1, 1919, if you deposit the following amounts:

Jan. 1, 1918	$10.00	July 15, 1918	$15.00
Feb. 15, 1918	25.00	Sept. 10, 1918	20.00
June 15, 1918	10.00	Dec. 10, 1918	40.00

7. If you deposited the above amounts in such a bank and withdrew $15.00 March 15, 1918, how much would you have on hand Jan. 1, 1919?

8. If the $15.00 was withdrawn Dec. 10, 1918, how much would you have on hand Jan. 1, 1919?
9. What is the interest on $400.00 at 6 per cent. for one year and six months?
10. What is the interest on $500.00 at 6 per cent. for one year, three months and a half?
11. If $500.00 was deposited in a savings bank at 3 per cent. compound interest July 1, 1917, what will be due the depositor if the money is not withdrawn until January 1, 1920 (if the interest is compounded semi-annually on January 1 and July 1)?
12. Ascertain from a local bank, when interest would begin if money was deposited on the following dates:

December 24th	June 15th	October 1st
March 1st	July 1st	November 10th
April 10th	August 1st	December 1st
May 10th	September 20th	

13. If the following amounts were deposited during the year, ascertain the minimum amount that would draw interest during the year.

Deposits		Withdrawals	
Jan. 1st	$500.00	Feb. 1st	$100.00
April 1st	100.00	May 10th	100.00
June 1st	150.00	Sept. 15th	150.00
July 1st	50.00	Nov. 10th	50.00
Sept. 1st	100.00		
Nov. 1st	50.00		

14. What would be the accumulated interest on the above account at the end of the year?
15. Procure and explain a Liberty Bond; Thrift Stamps.

THEMES FOR DEBATE

Resolved:

1. That savings should be the prime requisite of every family.
2. That the wife is in a better position to save than is the husband.

REFERENCES

BROWN, M. W., DEVELOPMENT OF THRIFT. Macmillan.
FARMER, L. C., A. B. C. OF HOME SAVING. Harper & Bros.

CHAPTER XXVI

NSTITUTIONS FOR SAVINGS AND INVESTMENTS

CONSIDERABLE has been said about the necessity for saving, and sewhere the commercial and savings banks have been described p. 19), but there are other institutions for savings of which the ousehold may make use. One of the most deserving is the Postal avings System, established by Act of Congress in 1910.

Postal Savings System.—Any post-office may on public de- and become a Postal Savings Bank to receive deposits on which per cent. interest is paid, and the credit of the United States is ledged to the payment of postal savings deposits.

WHO MAY DEPOSIT: (*a*) Any person over 10 years of age may ecome a depositor. A married woman must deposit in her own ame, and this deposit will be free from any control or interference y her husband.

(*b*) No one but individuals may open an account. No two ersons may open a joint account, and no account may be opened trust for another, and no corporation, company, firm, association society account may be opened.

(*c*) A person may have but one account and this may be opened thout charge at any depository regardless of residence.

(*d*) After an account has been opened, subsequent deposits ay be made in person or forwarded by registered mail or by money ders.

DEPOSITS: (*a*) A Postal Savings Certificate is issued by the stmaster bearing the name of the depositor, the number of his count, the date of issue and name of the depository office; and duplicate is kept by the postmaster. Certificates are in fixed nominations of $1, $2, $5, $10, $20, $50, and $100; and the posit must be in even dollars. These certificates bear interest 2 per cent., not compounded, payable annually. They are not ansferable nor negotiable.

(*b*) Amounts less than $1 may be saved in dime units for deposit y purchasing 10-cent Postal Savings cards and 10-cent Postal avings stamps. Each Postal Savings card bears blank spaces in hich such stamps may be affixed from time to time. A Postal

Savings card with nine Postal Savings stamps affixed will be accepted as a deposit of $1 as 10 cents was paid originally for the card itself. Ordinary postage stamps cannot be exchanged for Postal Savings cards or stamps.

(*c*) No one person may deposit more than $100 in any one calendar month, nor have a total balance to his credit at any one time of more than $1000 exclusive of accumulated interest. But "Postal Savings Certificates" of $20 may be exchanged for "Postal Bonds" without limit, so that practically one can use the system for as large savings as may be desired. These bonds bear interest at 2½ per cent.

WITHDRAWALS: Deposits with any interest payable thereon may be withdrawn in whole or in part at any time, by properly endorsing the certificate and surrendering it at the office of issue; if part only is withdrawn the certificate will be cancelled and a new certificate covering the remaining amount will be issued.

ACCOUNT OF WOMAN WHO MARRIES: A woman depositor who marries after having opened an account, should present her certificate of deposit to the postmaster at the issuing office that it may be endorsed as payable to her in her new name. If she fails to do this, the postmaster will refuse to receive her further deposits.

A leaflet containing additional information concerning postal savings may be obtained from the postmaster.

Building and Loan Associations.—This is a popular institution for savings, the first example of which was formed at Birmingham, England, in 1795, and called a building club, and the first such organization in this country was formed in Philadelphia in 1831. These associations soon spread throughout the country so that now there are few states that are not well represented with many such organizations.

In most, if not in all, states, Building and Loan Associations are subject to the inspection of State officials, and in some states they are placed under the state savings bank laws. In New York, for instance, these associations are required to furnish a bond and to make a deposit with the state of $10,000. Public officials make frequent inspection of their books and funds, and the books are subject at any time to the inspection of the public. The ratio of expense to receipts in these organizations is estimated at slightly over 1 per cent. One should always make careful inquiry in select-

; an Association; while usually as safe as a bank, there have been eptions, and careful local inquiry should be made.

Nearly every association has its own plans for the payment of nthly premiums, for the distribution of profits and the with- wal of funds, but the principles upon which all of these organ- tions are formed are practically the same.

PURPOSE: (*a*) The prime purpose of all these associations is coöperation of persons of moderate means who desire to borrow ney for building purposes, and usually for homes.

(*b*) Second, to provide a safe investment at an attractive rate interest, for those who wish to invest their savings, so that those o do not wish to build may profit from the investment features ered and in turn contribute to the borrowing facilities of those o do wish to build.

PLAN: A member usually purchases one or more shares of stock, t over 30 or 40 as a maximum, upon which he makes an initial yment of $1 for each share. Monthly payments are then made the same rate of $1 per share until the total amount paid plus interest accrued, amounts to the par value of the share, ich is usually $200.

The stock of an association whose shares are $200 if paid for in nthly instalments of $1 may be expected to reach par in about or twelve years, or if the shares are $250 and they are payable weekly instalments of 25 cents, they will mature about the same ne. A small fine is sometimes charged for delayed payments.

A member may be an investor, or an investor and borrower; no one can borrow without first becoming an investing member.

LOAN FEATURES: At stated intervals, or whenever a given sum been accumulated in the treasury through the payments made shares, loans may be made to members, but if there is not a ficient amount on hand to meet the needs of all prospective bor- rers, the funds are sometimes disposed of among the members lot, or by auction, to the bidder or bidders offering the highest mium.

The amount borrowed by any one member cannot exceed the ount of his shares. If a member has subscribed for ten shares $200 per share, the par value of his stock is $2000, which sum he y borrow from the association, under its rules, when that sum available. Interest is of course charged as upon any loan, and ually at 6 per cent.

SECURITY FOR THE LOAN: The borrower of $2000 holding that amount of shares in the association may only have paid in a few dollars on his shares; therefore it is necessary for the association to protect the loan which is usually done by taking a mortgage upon the land upon which a structure is to be built.

PREMIUMS: If the demand for loans exceeds the supply of available funds, as previously stated, the money on hand may be loaned to the highest bidder. For instance, a member may be willing to pay a premium of $50 for the loan of $1000 in which case the premium might be deducted from the $1000 loan, interest being paid upon the full amount of the loan. Sometimes the premium is allowed to be paid in four weekly instalments. Different plans are in vogue among the various associations, and in some there are certain small fees to be paid, all of which with premiums and interest on money paid in on shares, goes to form the working capital of the association.

MATURITY OF LOAN: When the borrowing member has paid in the full amount of his stock, his loan is extinguished, because a sufficient sum has then been accumulated to equal the amount of the loan.

INVESTMENT FEATURES: Many make use of the Building and Loan system as a safe and profitable investment for small, periodical savings. A certain amount of stock is subscribed for, say $1000, and then definite monthly payments prescribed by the association are paid in. When the par value of the stock has been equalled by the member's monthly payments, plus the interest allowed upon the same, his investment has reached maturity and he may withdraw both the principal and the interest, which will amount to $1000, or if he desires, he may leave it with the association as an investment. Upon deposits made regularly until stock matures, interest is often paid at 7 per cent. or upward; but the rate is less if money is withdrawn.

WITHDRAWALS: A member may withdraw from an Association before the maturity of his shares and receive the amount of money paid in, plus interest at a lower rate than that for deposits allowed to run their full term, and under certain conditions plus a fixed proportion of any dividends earned by the Association based upon the amount of the shares held; but usually if the withdrawal is made within the first year of membership, no interest or dividends are allowed.

Credit Unions.—In some states, as in Massachusetts, the legis-

lature had provided for the organization of what are known as "Credit Unions" or coöperative credit associations, the purpose of which is to provide an opportunity whereby those of small means may borrow especially small sums, upon security or without security other than the guaranty of one or more members of the Union. The first organization of this kind was formed in Germany in 1848, and from there it spread to Austria, Italy and the British possessions. In some places these unions assume two forms—one to meet the needs of agricultural communities and the other to meet urban conditions. In 1910 Massachusetts was the first American state to authorize such a Union. They now exist in New York, Wisconsin and Texas.

The members fix the value of the membership shares in the Union, and allow them to be paid for at once or in such instalments as the member desires; whereas, in Building and Loan Associations and Coöperative Banks the amount of the monthly instalments is definitely fixed. The fundamental principles of the system, which by the Massachusetts law must govern the Credit Unions in that state, are stated officially as follows:

"First: The association shall be organized on coöperative lines. As the members may be either borrowers or lenders, according to circumstances, its affairs must be conducted in such a way as to give fair and equitable treatment to both classes.

"Second: The association shall be one of men, and not of shares. To this end each shareholder has one vote, irrespective of the number of shares he holds. Furthermore, the members set a limit on the number of shares or the amount of deposit which a member may have in the association, in order that no one person may have too dominating an influence or be able to damage the association by suddenly withdrawing large sums.

"Third: Loans shall be made only for the purposes which promise to result in a saving or a profit to the borrower. Each applicant for a loan must state the object for which he desires to borrow, in order that the credit committee, which passes on all loans, may rigidly exclude thriftless and improvident borrowing.

"Fourth: As loans are made only to members, and as any member may become a borrower, care must be taken to admit to membership only men and women of honesty and industry.

"Fifth: As personal knowledge of the character of the members is essential, the membership in an association must be re-

stricted to citizens of a small community, or of a small subdivisio of a large city, or to the employes of a mercantile, manufacturin or transportation company, etc.

"SIXTH: Every provision must be made to bring the associatio within the reach of the humblest citizen. The par value of th shares should be small (the average being about $5), and shares should be payable in very small instalments. Loans of very small amounts should be made, and should be repayable in instalments if desired.

"SEVENTH: In making loans it should be recognized that character and industry is the basis of credit, and a loan may be made to a member who has not adequate security to pledge for it, provided he can secure the guaranty of one or more members, or of a reliable business man or owner of real estate.

"EIGHTH: Borrowers must carry out to the letter the conditions of repayment agreed upon at the time their loans are made. Prompt payment of obligations is a fundamental requirement of these associations."

In Massachusetts, seven citizens of the state may form a Credit Union, although eleven are necessary before business may be transacted. The organization is similar to that of a Savings Bank. Loans are made to members only and 20 per cent. of the net annual incom is set aside as a guaranty fund until it equals the amount of t capital stock paid in. All entrance fees are added to this fund. T not only acts as a safeguard but it enables interest rates to be k as low as is consistent with a fair return to the shareholders.

Coöperative Banks.—Some states provide for the organiza of coöperative banks. The ultimate value of a share of stock in a bank is fixed by law at $200, which must be paid for in mon instalments of $1 each. Members may save money in such b only by the purchase of shares.

The plan of these banks is somewhat similar to that o Building and Loan Associations, at least so far as the matur the shares are concerned. The interest on the payments ma gether with the proportionate share of the profits of the insti plus the investment payments, go to mature the shares. Lo also made in a similar manner to that of the Building an Associations, a minimum rate of interest being fixed at 5 p

Loans, however, may be made upon the amount of st for, such stock being pledged as security for the loan, wh

Building and Loan Associations loans are usually made upon real estate security only. Unlike the Credit Union, the Coöperative Bank does not loan on personal security.

Such banks are under the supervision of the State Banking department of the state in which they are organized.

Federal Farm Loans.—An Act of Congress approved July 17, 1916, provides for the organization of *twelve* Federal Land Banks. Farmers desiring loans from such banks will be required to become members of local national farm-loan associations.

The law also provides for the organization of joint-stock land banks which may lend money directly to farmers, but the organization of such banks depends entirely on private initiative and the investment of private capital.

The Local National Farm-loan Association.—In order to organize such an association, at least 10 prospective borrowers are necessary, and the aggregate amount they wish to borrow must not be less than $20,000.

The shares are $5 each and every member must subscribe for shares equal to 5 per cent. of his proposed loan.

The articles of association properly executed must be forwarded to the nearest Federal Land Bank, and the local association must subscribe for shares of stock (value $5 per share) in the Federal land bank equal to the amount of its own shares of stock.

The Federal land bank sends an appraiser to investigate the solvency and character of the applicants for loans, and to determine the value of the land to be mortgaged. If the report is favorable the charter for the local association is granted; if not favorable it is refused.

The local association does not lend money to farmers, but merely acts as an agent for the farmers and for the Federal Land Banks. It helps appraise land, it passes upon applicants for membership and performs much necessary clerical work. It is also authorized to receive deposits, and to issue certificates therefor, each bearing 4 per cent. interest for not longer than one year. When presented at the Federal Land Bank in amounts of $25 or multiples thereof they are converted into land-bank bonds. In this way it adds to the available capital with which to make loans.

The Federal Land Bank.—Each of these twelve banks has a minimum capital of $750,000 which is raised by public subscription,

or in part or in full subscribed to by the Federal Treasury. Loans to farmers are made through this bank.

After such a bank receives $100,000 in subscriptions for its stock from local associations, a permanent board of directors of nine members is elected for each Bank, six from the local associations and three appointed by the Federal Farm-loan board. Government funds may be deposited in these banks, not to exceed $6,000,000 in the aggregate at any one time, at the discretion of the Secretary of the Treasury.

Loans.—Loans run for not less than 5 years and not more than 40 years. The rate of interest charged must not exceed 6 per cent., or more than 1 per cent. over the interest paid on bonds issued by the Federal Land Banks.

Net profits earned by the Federal Land Banks, after paying expenses and providing for a required reserve, will be returned to the local national farm-loan associations, to be distributed among the borrowers after deducting therefrom the expenses and reserve requirements of the local associations. In this way the interest actually paid by the farmer is expected to be greatly reduced.

Each loan must make provision for annual or semi-annual payments on its principal, so that the debt will be entirely paid, including interest at the end of the period. At the end of the first five-year period, the borrower is given the option of paying any additional sum on the principal in multiples of $25 on any interest date.

Amortization.—This term is used to indicate the reduction or extinction of a debt at the end of a fixed period of time, through the periodical payments, at fixed intervals, of a certain sum representing a part payment on principal together with accrued interest. At the end of an amortization period both principal and interest on a debt will have been paid in full.

As an illustration, if a farmer borrows $1000 at 5 per cent. to be paid back in 20 annual instalments on this plan, he will make a payment of $80.24 at the end of each year for 19 years, and $80.33 for the twentieth year, when the debt will be cancelled.

The following table shows the annual payments required on a loan of $1000 running for a 20-year period, with interest at 5, 5½ and 6 per cent. For larger sums, multiples of $1000, the amounts are proportionately multiplied:

Amortization table for a loan of **$1,000**, *payable in* **20** *annual installments, with interest at* **5**, **5½**, *and* **6** *per cent.*[1]

Completed years.	Interest at 5 per cent.				Interest at 5½ per cent.				Interest at 6 per cent.			
	Payment.	Interest.	Applied on principal.	Principal still unpaid.	Payment.	Interest.	Applied on principal	Principal still unpaid.	Payment.	Interest.	Applied on principal.	Principal still unpaid.
1	$80.24	$50.00	$30.24	$969.76	$83.68	$55.00	$28.68	$971.32	$87.18	$60.00	$27.18	$972.82
2	80.24	48.49	31.75	938.01	83.68	53.42	30.26	941.06	87.18	58.37	28.81	944.01
3	80.24	46.90	33.34	904.67	83.68	51.76	31.92	909.14	87.18	56.64	30.54	913.47
4	80.24	45.23	35.01	869.66	83.68	50.00	33.68	875.46	87.18	54.81	32.37	881.10
5	80.24	43.48	36.76	832.90	83.68	48.15	35.53	839.93	87.18	52.87	34.31	846.79
6	80.24	41.65	38.59	794.31	83.68	46.20	37.48	802.45	87.18	50.81	36.37	810.42
7	80.24	39.72	40.52	753.79	83.68	44.13	39.55	762.90	87.18	48.63	38.55	771.87
8	80.24	37.69	42.55	711.24	83.68	41.96	41.72	721.18	87.18	46.31	40.87	731.00
9	80.24	35.56	44.68	666.56	83.68	39.66	44.02	677.16	87.18	43.86	43.32	687.68
10	80.24	33.33	46.91	619.65	83.68	37.24	46.44	630.72	87.18	41.26	45.92	641.76
11	80.24	30.98	49.26	570.39	83.68	34.69	48.99	581.73	87.18	38.51	48.67	593.09
12	80.24	28.52	51.72	518.67	83.68	32.00	51.68	530.05	87.18	35.59	51.59	541.50
13	80.24	25.93	54.31	464.36	83.68	29.15	54.53	475.52	87.18	32.49	54.69	486.81
14	80.24	23.22	57.02	407.34	83.68	26.15	57.53	417.99	87.18	29.21	57.97	428.84
15	80.24	20.37	59.87	347.47	83.68	22.99	60.69	357.30	87.18	25.73	61.45	367.39
16	80.24	17.37	62.87	284.60	83.68	19.65	64.03	293.27	87.18	22.04	65.14	302.25
17	80.24	14.23	66.01	218.59	83.68	16.13	67.55	225.72	87.18	18.14	69.04	233.21
18	80.24	10.93	69.31	149.28	83.68	12.41	71.27	154.45	87.18	13.99	73.19	160.02
19	80.24	7.46	72.78	76.50	83.68	8.49	75.19	79.26	87.18	9.60	77.58	82.44
20	80.33	3.83	76.50	.....	83.62	4.36	79.26	.....	87.18	4.95	82.44	.....
Total	1,604.89	604.89	1,000.00	.....	1,673.54	673.54	1,000.00	.....	1,743.81	743.81	1,000.00	.....

Who May Borrow from Federal Land Banks.—Farmers' Bulletin 792 states that "In order to obtain a loan from a Federal Land Bank the borrower must agree to use the proceeds of the loan for one or more of certain objects specified in the act, namely, for the purchase of land for agricultural use; for equipment, fertilizers, and livestock for the land mortgaged; for buildings and other permanent improvements on said land; or, with certain limitations, for the payment of indebtedness. The borrower must furnish as security a first mortgage on farm land. The amount of the loan must not be less than $100 nor more than $10,000. The loan must not exceed 50 per cent. of the appraised value of the farm land and 20 per cent. of the value of the permanent improvements adequately insured. The borrower must be engaged, or about to be engaged, in the cultivation of the farm mortgaged. He will also be required, ordinarily, to become a member of a local national farm-loan association."

Investment Features Offered by Federal Land Banks.—The same Bulletin explains the investment features of the land banks as follows:

In place of selling the actual mortgages, the Federal Land Banks are authorized to issue bonds secured by an assignment and pledge of the mortgages, in denominations of $25, $50, $100, $500, and $1000. Because of the careful safeguards applied to these bonds they are expected to prove attractive to a large number of investors who desire to purchase reliable and convenient securities. It is believed that the bonds of small denominations will encourage saving and investment. They are exempt from all forms of taxation.

Investment Value of Annual Payments.—Circular No. 60, issued by the Office of the Secretary of Agriculture, is especially valuable in computing the annual payments that must be made to reduce and extinguish the principal and interest of a debt during a term of years, explained in the circular mentioned as follows:

"This figure is found by dividing the amount of the loan by the present value (at compound interest) of a payment of *one dollar* at the end of each year for the term of the loan. Thus, the present value of a payment of $1 at the end of each year for 20 years reckoned at 5 per cent. compound interest, is $12.46221; dividing $1000 by this figure, we get $80.24 as the number of dollars that must be paid each year in order to cancel a loan of $1000, with interest at 5 per cent. in 20 years. In case of semi-annual payments

Present value of an annual payment of one dollar, (at the end of each year) for any number of years up to 40, compound discount at 2, 2½, 3, 3½, 4, 4½, 5, 5½, and 6 per cent.

Years.	Rate of Discount.								
	2 per cent.	2½ per cent.	3 per cent.	3½ per cent.	4 per cent.	4½ per cent.	5 per cent.	5½ per cent.	6 per cent.
1.....	$0.98039	$0.97561	$0.97087	$0.96618	$0.96154	$0.95694	$0.95238	$0.94787	$0.94340
2.....	1.94156	1.92742	1.91347	1.89970	1.88609	1.87267	1.85941	1.84632	1.83339
3.....	2.88388	2.85602	2.82861	2.80164	2.77509	2.74897	2.72325	2.69793	2.67301
4.....	3.80773	3.76197	3.71710	3.67308	3.62989	3.58753	3.54595	3.50515	3.46511
5.....	4.71346	4.64583	4.57971	4.51505	4.45182	4.38998	4.32948	4.27028	4.21236
6.....	5.60143	5.50813	5.41719	5.32855	5.24214	5.15787	5.07569	4.99553	4.91732
7.....	6.47199	6.34939	6.23028	6.11455	6.00205	5.89270	5.78637	5.68297	5.58238
8.....	7.32548	7.17014	7.01969	6.87396	6.73274	6.59589	6.46321	6.33457	6.20979
9.....	8.16224	7.97086	7.78611	7.60769	7.43533	7.26879	7.10782	6.95220	6.80169
10.....	8.98258	8.75206	8.53020	8.31661	8.11090	7.91272	7.72173	7.53763	7.36009
11.....	9.78685	9.51421	9.25263	9.00155	8.76048	8.52892	8.30641	8.09254	7.88687
12.....	10.57534	10.25776	9.95401	9.66334	9.38507	9.11858	8.86325	8.61852	8.38384
13.....	11.34837	10.98318	10.63496	10.30274	9.98565	9.68285	9.39357	9.11708	8.85268
14.....	12.10625	11.69091	11.29607	10.92052	10.56312	10.22283	9.89864	9.58965	9.29498
15.....	12.84926	12.38138	11.93794	11.51741	11.11839	10.73955	10.37966	10.03758	9.71225
16.....	13.57771	13.05500	12.56110	12.09412	11.65230	11.23402	10.83777	10.46216	10.10589
17.....	14.29187	13.71220	13.16612	12.65132	12.16567	11.70719	11.27406	10.86461	10.47726
18.....	14.99203	14.35336	13.75351	13.18968	12.65930	12.15999	11.68959	11.24607	10.82762
19.....	15.67846	14.97889	14.32380	13.70984	13.13394	12.59329	12.08532	11.60765	11.15810
20.....	16.35143	15.58916	14.87748	14.21241	13.59033	13.00794	12.46221	11.95038	11.46992

Present value of an annual payment of one dollar at the end of each year for any number of years up to **40**, *compound discount at* **2, 2½, 3, 3½, 4, 4½, 5, 5½,** *and* **6** *per cent.*

Years.	Rate of Discount.								
	2 per cent.	2½ per cent.	3 per cent.	3½ per cent.	4 per cent.	4½ per cent.	5 per cent.	5½ per cent.	6 per cent.
21	17.01121	16.18455	15.41503	14.69798	14.02916	13.40472	12.82115	12.27524	11.76408
22	17.65805	16.76541	15.93692	15.16713	14.45111	13.78442	13.16300	12.58317	12.04158
23	18.29220	17.33211	16.44361	15.62041	14.85684	14.14777	13.48857	12.87504	12.30338
24	18.91392	17.88498	16,93554	16.05827	15.24696	14.49548	13.79864	13.15170	12.55066
25	19.52345	18.42437	17.41315	16.48152	15.62208	14.82821	14.09394	13.41393	12.78336
26	20.12103	18.95061	17.87685	16.89036	15.98277	15.14661	14.37518	13.66250	13.00317
27	20.70690	19.46401	18.32703	17.28537	16.32958	15.45130	14.64303	13.89810	13.21053
28	21.28127	19.96489	18.76411	17.66702	16.66306	15.74287	14.89813	14.12142	13.40616
29	21.84438	20.45355	19.18846	18.03577	16.98371	16.02189	15.14107	14.33310	13.59072
30	22.39645	20.93029	19.60044	18.39205	17.29203	16.28889	15.37245	14.53375	13.76483
31	22.93770	21.39540	20.00043	18.73628	17.58849	16.54439	15.59281	14.72393	13.92909
32	23.46833	21.84917	20.38877	19.06887	17.87355	16.78889	15.80267	14.90420	14.08404
33	23.98856	22.29188	20.76579	19.39021	18.14764	17.02286	16.00255	15.07507	14.23023
34	24.49859	22.72378	21.13184	19.70069	18.41120	17.24676	16.19290	15.23703	14.36814
35	24.99862	23.14515	21.48722	20.00066	18.66461	17.46101	16.37419	15.39055	14.49825
36	25.48884	23.55625	21.83225	20.29050	18.90828	17.66604	16.54685	15.53607	14.62099
37	25.96945	23.95731	22.16724	20.57053	19.14258	17.86224	16.71128	15.67400	14.73678
38	26.44064	24.34860	22.49246	20.84109	19.36786	18.04999	16.86789	15.80474	14.84602
39	26.90259	24.73034	22.80822	21.10250	19.58448	18.22965	17.01704	15.92866	14.94907
40	27.35548	25.10277	23.11477	21.35508	19.79277	18.40158	17.15908	16.04612	15.04630

erest periods are counted instead of the years, and a rate
o one-half the annual rate is used."

e Morris plan banks were originated and started by A. J.
, an attorney, in Norfolk, Va., about 1912, for the purpose
ing money to wage-earners and those unable to borrow at
ger commercial banks. The endorsement of two responsible
is required on a note. Money is loaned at 6 per cent.
nents on notes are made in small weekly sums, according to
ount borrowed; for instance, $1 per week on a $50 loan
per week on a $100 loan. In this way the loan may be made
onger period than that required by other banks and repay-
in small amounts are accepted weekly.

ney may be deposited in amounts of $50 and multiples thereof,
rtificates are issued for the deposits drawing 5 per cent.
. The banks are generally well financed.

QUESTIONS

ie the various types of institutions for saving in this country.
many of these institutions are represented in your community?
t is the minimum and maximum sum that may be deposited by an
dividual in the Postal Savings Bank?
Jones transferred his postal savings certificate to the Green Grocer
mpany in payment of his bill, but the latter refused to accept it,
they claimed it was not "legal tender" and not transferable. Mr.
nes claimed it was transferable. Who was right?
t interest is allowed on Postal Savings Accounts?
t interest is allowed on Postal Savings Bonds?
Postal Savings Bonds subject to taxation?
ribe the purpose and plan of operation of Building and Loan Asso-
ations; of Credit Unions, of Co-operative Banks.
t is the purpose or object of the Federal Land Banks?
many Federal Land Banks are there in the United States?
t is their relation to the National Farm-Loan Associations?
t is meant by "amortization"?
t are the investment features offered by Federal Land-Banks?
t interest is charged on loans made to farmers through National
rm-Loan Associations?

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CHAPTER XXVII

INVESTMENTS

As suggested in another chapter, persons without business experience should not invest savings or other funds without the advice of a competent and honest banker, broker or lawyer. This, however, should not prevent one from learning all he can pertaining to the various forms of investment, a few of which are mentioned in this chapter.

In the investment of money, one good rule to remember is that generally speaking, *the lower the rate of interest the safer will be the investment.* The more risk involved in an investment, the higher will be the interest offered. As a rule, one must choose either one or the other—safety of principal with smaller return on it, or a greater risk for the sake of a large return.

Before deciding upon assuming a larger risk for a greater return, review carefully the advantages offered by the following institutions for saving: (*a*) Savings Banks, (*b*) Coöperative Banks, (*c*) Credit Unions, (*d*) Postal Savings Banks, (*e*) Federal Land Banks, (*f*) Building and Loan Associations (Chapter XXVI).

Personal Loans.—In loaning money to individuals for short terms, such as thirty, sixty, ninety or one hundred and twenty days, commercial banks charge six per cent. interest. If a person offers to pay another eight or ten per cent. interest for such a loan, the chances are that his credit at the bank is not good, because if such were the case, that person would borrow the money from the bank at the lower rate of interest. In making such loans, one should be careful to learn the character and financial standing of the borrower. If one has a bank account such information can probably be procured for one by the banker.

Another point to remember is that if such a loan is to be made, re advancing the money, all of the conditions that might be red by the bank should be carried out. If the bank would re an endorser on the note, or security, the individual loaning money should demand the same protection.

romissory Notes.—A promissory note is exactly what its

name implies, a written promise to pay. Following is a sample of such a note:

$100 CHICAGO, ILL., Oct. 1, 1918.

Sixty days after date, *I* promise to pay to John Jones..... ..... or order, *One Hundred and No-100*..... Dollars, For value received, with interest at 6 per cent. per annum, from date, payable at the First National Bank, Chicago, Illinois.

WILLIAM SMITH.

The principal and vital parts of such a note are the following: (*a*) "I promise to pay." (*b*) "Interest at 6 per cent." (*c*) The date. (*d*) Signature. (*e*) "For value received." (*f*) "Per annum" from date (or maturity). (*g*) Date of maturity.

The note must express the promise to pay, and it must show that the promise to pay is in exchange for "value received." The date, the date of maturity and the signature, of course, are necessary. Where the note is to be paid, may or may not be expressed, as desired.

If the words "per annum" follow the promise to pay interest, this allows the holder of the note, if the principal is not paid within a year, to add the accumulated interest to the principal at the end of that period and to charge the agreed rate of interest upon both the unpaid principal and interest.

In loaning money on promissory notes, banks usually deduct the interest on the loan from the principal, in which event the note would read "interest at 6 per cent. per annum from maturity." As an illustration, if $200 is borrowed at 6 per cent. for sixty days, the interest would be $2 for that period and this amount would be retained by the bank, and the balance $198 paid to the borrower. If the note is paid when due, there will be no further interest; but if not, interest will have to be paid from the date of maturity until the note is paid.

If interest is not paid in advance, then the note would read, "interest at 6 per cent. per annum *from date.*"

A Demand Note.—This form of note may read the same as any promissory note with the exception that instead of inserting a time of payment, the words "On demand" are used, as "*On demand,* I promise to pay, etc."

This form of note allows the borrower to pay the amount due

whenever ready, and it also allows the lender to "demand" the payment of the note with any accrued interest at any time.

A Judgment Note.—A judgment note is the same as a promissory note, with the exception that it contains a paragraph "confessing judgment" on the part of the borrower in the event the note is not paid when due, and sometimes agreeing to the payment of an attorney's fee in such an event. Such a "confession of judgment" avoids certain court proceedings on the part of the lender and judgment can be entered on the county records against any property possessed or to be possessed in the county by the borrower within the period fixed by the statute of limitation.

Mortgage Notes.—Strictly speaking, a mortgage note is any note secured by a mortgage, chattel or real estate, but in this connection reference is meant to a note secured by a real estate mortgage.

Such notes, instead of running for a short period, usually run for from three to five years. Local and national financial conditions govern the rate of interest, as do sometimes the size of the loan and its desirability as an investment, running from 5 per cent., 5½ per cent. and 6 per cent. on city buildings to from 6 per cent. to 10 per cent. on farm property.

It is not safe for the ordinary individual to pass upon such loans without the assistance and advice of both a banker and an attorney; the banker to pass upon the safety of the investment and the value of the security offered, and the lawyer to pass upon the title and the legality of the mortgage.

In making such mortgages the following points should be observed:

(*a*) See that title to the property is perfect.

(*b*) Require abstract of title, guarantee policy or Torrens Registration. (See Chapter XXXI, p. 394.)

(*c*) Have attorney pass upon both.

(*d*) Have a banker pass upon the desirability of the investment.

(*e*) See that the loan does not exceed 60 per cent. of the value of the security.

(*f*) Make provisions for prepayment of part of the loan before the full period of maturity expires, so as to reduce the risk.

(*g*) See that buildings are properly insured, and kept insured during life of the mortgage, and that the policy is payable to the mortgagee.

For titles, foreclosure or mortgages, second mortgages, and other aspects of the real estate problem, see Chapter XXXI, p. 393.

Bonds.—Cities, townships, counties, states and the Federal Government, railroads and other corporations requiring money that cannot be raised in other ways, issue bonds which are promises to pay certain sums of money at definite times, with interest at a certain rate payable at regular intervals.

A city may desire to build waterworks, or a sewer system, or a railroad may wish to build a branch line, and in such cases a bond issue is made and offered for sale, usually in denominations of $500 and $1000.

In the case of a governmental corporation such as a city or county, both the credit and the property of the unit of government issuing the bonds constitute the security offered the investor. In the case of private corporations, as a railroad, such bonds are usually protected by a mortgage on all of the property of the corporation. If, however, a million-dollar mortgage were issued on the property of a corporation, few persons would be able or willing to invest that amount of money, and therefore the million dollars is divided up into bonds of smaller denominations which may be subscribed to in small amounts such as $500 or $1000 as stated.

At "Par Value."—The amount written on the face of the bond is the par value of the bond, as this is the amount that must be paid at maturity by the corporation issuing the same to the person then holding the bond. For various reasons, a certain kind of bond may not be in demand by investors, in which case the corporation issuing the same, or those having invested in such bonds and desiring to sell them, may have to offer them at less than par in order to find a buyer. Thus a bond with $100 face value may be bought and sold at $97, or $3 below par; but this would not relieve the corporation from being compelled to pay the full or face value of $100 at maturity.

At a "Premium."—Sometimes the bonds of a corporation may be so desirable as an investment that purchasers bid against each other in trying to buy them, with the result that the price goes to a "premium," or above par. For instance, a $100 bond may be bought and sold at $102; that is, at a premium of $2. But at maturity such a bond calls only for a $100 payment to the holder.

The investor may ask "Why should I have to pay $1032.50 for a 20-year 5 per cent. bond of a certain railroad when I shall only

get $1000 on the bond at maturity?" The reason is that persons are willing to pay the premium in order to get so safe an investment paying a rate of interest higher than usual bank interest, and running 20 years before the bond matures. Such a bond pays $50 a year interest, whereas a bank would only pay $30 on a $1000. The $32.50 premium paid only amounts to $1.62 per year, for the twenty years, so deducting this from the $50 interest leaves a net yield of $48.38 per year against perhaps $30 interest from a bank. The $32.50 premium, or $1.62 per year, is merely a fee paid so that you will get $50 a year interest for your money instead of only $30.

Below Par.—Certain bonds may be bought below par, either because the security is not of the best, although the rate of interest is high; or perhaps because the rate of interest offered is so low that the bond is not attractive because of low returns. Bond prices also vary with conditions of the money market.

The actual return on money investment in a bond, it is to be noted, is determined not only by the rate of interest paid on the face of the bond, but by the price paid in purchasing the bond; for example, a bond paying 6 per cent. or $6 a year and costing $120, really pays only 5 per cent. on the investment ($6 is 5 per cent. of $120); and a bond paying 4 per cent. or $4 and costing $80 really pays 5 per cent. on the investment ($4 is 5 per cent. of $80).

Besides government and municipal bonds, there are railroad bonds and bonds of certain industrial companies which are good investments. A banker is in a position to give reliable advice or to obtain it. Besides security of principal, one will wish to consider size and certainty of interest payment; and the probable stability of market value of the bond, in case one should later wish to sell it. Bonds are transferable and negotiable, so that one may sell them if there is a market for them, or borrow upon them by placing them with a bank as security.

Banker's Partial Payment Bonds.—In the chapter on "Savings and Methods in Saving" is given a description of Banker's Partial Payment Bonds, a method recently devised for saving a certain amount monthly. During a period of years this amount, plus the interest allowed and a bonus paid by the bank, will at the expiration of the period agreed upon equal the amount of the bond purchased.

Stocks.—Stocks are merely shares of ownership in a company and its property, upon which is paid interest in the form of divi-

dends, if the company is doing a profitable business. The dividends depend entirely upon the profits earned by the company.

A company incorporated for $100,000 may decide to issue its shares or stock in denominations of $100, in which case 1000 shares of stock will be offered for sale, and the proceeds of the sale will be used to start the company in business. If the company earns enough money to pay all expenses for the year, besides a net profit of $5000, the latter amount represents the earnings, and the company can, if it wish, declare that amount of dividends to be divided among the stockholders. With 1000 shares issued this would mean a dividend of $5 for each $100 worth of stock issued, or a 5 per cent. dividend.

Instead of paying a dividend, however, the company may, if it elects, place the $5000 or any part of it, in a "sinking fund" or a fund, to which will be added from time to time, more money for some special purpose, such as the enlargement of the plant, or for other use, or it may hold the $5000 in a reserve fund for possible contingencies.

The value of stocks and their earning power fluctuate. Much depends upon the management of the company, and everything depends upon its success. Stocks of companies that are sound and that offer unusual inducements to the purchaser, rarely reach the general public.

Preferred and Common.—Stocks are of two kinds: *preferred*, or those the earnings of which, if there are any, must first be divided, the dividend being at a stated percentage, 6 per cent. or 8 per cent., as the case may be; and *common* stock, or that which receives a share of the earnings after preferred dividends are paid. There is no limit to the dividend which may be paid on common stock. Preferred stock gives a more assured income but a limited one; common stock is less certain, but may give a much larger payment.

The distinctions between bonds and stocks which are of importance to investors should be grasped. Bonds, which are mortgages, are safer as regards principal and income; their principal value fluctuates in the market, but at maturity is worth a definite par value; the interest on the bond is a definite guaranteed rate; while interest and principal are virtually guaranteed by the pledge of the property "bonded."

As stocks are shares of ownership, their principal value varies

with the market and there is no ultimate par value; their dividend rates also are uncertain—while preferred stock if it pays dividends pays a certain rate, there is no guarantee that either it or common stock will pay dividends. Stocks are speculative and uncertain as to principal value and as to income. They are not suitable forms of investment for the person of small means, but only for those who can afford to lose what is put into them.

Caution.—A person should be careful about investing in any kind of stocks, especially those that are highly advertised, and those that offer glowing promises and great inducements, such as mining stock. Do not attempt to go into any business in which you have not been trained, and do not invest in any company, in which you do not have access to all the facts. Do not speculate in stocks. Do not buy of agents who solicit—good stocks are never sold in that way. *Do not take chances with your savings!* For the average person, bonds should be the form of investment rather than stocks; the average person should not buy stocks unless he can afford to lose his income and often to risk his principal.

Real Estate Investment.—Aside from the various projects offered by legitimate institutions for savings, perhaps the safest and most profitable form of investment that may be made by the average individual is the buying and selling of real estate, and in renting the same.

With proper guidance from a reputable banker and a lawyer, and with a fair knowledge of real estate values in a community, one may with a small capital, purchase a residence or a piece of business property and from the rent be able to pay operating expenses and at the same time earn a good rate of interest on the money invested. In doing this, however, one should stick to the community in which one lives. Do not be beguiled by advertisements of city subdivisions elsewhere being opened up by speculators. One must really have lived in a community for a number of years to become thoroughly conversant with real estate values. Real estate and its purchase is discussed in Chapter XXXI, but successful investment turns largely on knowledge of the local details which in every community affect the value of real estate.

In Conclusion.—In making any kind of investment, be sure that you know what you are doing, and even though you are satisfied with your knowledge of conditions and with your judgment, before taking action refer the entire matter either to a competent banker or to a lawyer.

QUESTIONS

1. Explain the meaning of a promissory note?
2. If a note reads "interest after maturity" when is the interest to be paid?
3. Is a note legal without the words "value received"?
4. What is a judgment note?
5. A demand note?
6. What is meant by stocks, or shares?
7. What is a bond?
8. In loaning money on real estate security what are the principal factors to be considered?
9. Why should one consult a banker in loaning money?
0. A lawyer?
1. What is meant by *par value?*
2. By the "premium" on a bond?
3. Why may bonds sell for less than par?
4. For more than par?
5. What is a "dividend"?
6. Which is the better investment, a bond or a share of stock? Why?

PROBLEMS AND DEMONSTRATIONS

1. Secure if possible, and paste in a note book, a blank Promissory Note; a Demand Note; a Judgment Note.
2. Write out a promissory note payable to John Doe for $275.00 due in sixty days with interest at 6 per cent. per annum.
3. If possible secure a blank bond and explain its purpose.
4. Jones paid $500.00 for a bond which was par value on the first of May, 1918. It drew interest at 4 per cent. from that date. Jones sold the bond May 1, 1919, at 98. How much did he make?
5. What per cent. of interest did it net him?

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CHAPTER XXVIII

OLD AGE

SPECIAL provision for old age is seldom thought of apart from a desire to save and accumulate a competency, but old age is a subject that should be considered independently of the question of saving.

Three Vital Factors in the Budget.—There are three factors, already mentioned and discussed, that deserve especial consideration in every family. They are "savings, life insurance and the purchase of a home." These factors are again mentioned that they may not be confused with the subject of preparation for old age.

Every couple starting out in life should, at once, plan on eventually owning their own home, whether it be a house or an apartment. It will only be a matter of years before that home will be paid for, and then, if adversity comes, the insistent monthly demand for rent will not be heard at their door.

The next step should be to provide a life insurance policy, not for any investment purpose, but simply for the sake of protection. This policy should preferably be a limited payment policy on which all payments are completed before old age comes on. Life insurance does not mean merely protection for some loved one; it also means protection for the holder of the policy. When old age does come, and when adversity demands that children or even strangers come to the rescue, such assistance need not be accepted as charity, as the possession of a life insurance policy means that children or others who assume the care of the aged may be fully recompensed when death matures the policy.

The third step is the determination to save something every week or month from the pay-envelope; to invest that money as it accumulates and to add the interest that it earns to the principal, in order that a competency may be accumulated.

Some may think that this is sufficient protection against old age, but is it?

Another Vital Factor Necessary.—If one could be assured that one's savings would continue to accumulate, and that they would always remain invested wisely and safely, perhaps that might

all that would be necessary to safeguard against the storms adversity, but the great danger comes from the fact that it is atural to make our savings earn more money. We have a right save and a duty to invest our savings, but all investments are bject to adverse influences. Judgment may be at fault. Carelessness of self or others may cause disaster. In making investments e generally takes certain speculative chances and the idea as to hat constitutes a margin of safety differs. The savings of a life ne may be easily swept away over night. How then may this guarded against? In two ways:

First: By deciding that a certain percentage of the sum laid de for saving shall be considered as an apportionment for old e. If as an illustration, twenty-five dollars a month is to be amount laid aside for saving, let five dollars of it go into an -age fund. Twenty dollars may be invested with safety as the st thought, but also with the idea of making it earn as much possible. This of course entails much more risk than it would it were deposited in a Savings Bank. The five dollars in the -age fund, however, should not be *risked* in any way or be bjected to speculation or hazard of any kind. It should be posited in a Savings Bank and be allowed to draw the customary ree per cent. interest, compounding the interest as soon as it umulates sufficiently. It may be invested in Government Bonds, t it should not be invested in real estate, in loans, mortgages or any form that possibly could cause loss.

Second: Regardless of the amount saved, the old-age fund may nply represent another apportionment to be made in the budget. fter the savings apportionment has been made, five dollars a nth or as much more as possible should be apportioned to this nd. In the course of twenty to forty years, even $5 a month at mpound interest amounts to a considerable sum. This fund should ver be used for speculative purposes, and it should not be used r anything involving any kind of risk. The sole purpose of such fund is to divorce the money intended for protection against age m other savings subject to investments with their necessary sks.

Some may say that endowment insurance policies will provide r just such exigencies. Perhaps they will, but they entail the penditure of more money per year than thousands of families can ake, and they also are subject to the inability of the holder to con-

tinue the payments of the necessary premiums. As intimated elsewhere, it is better to divorce the investment feature from the entire question of insurance.

The Relation of Children to Parents.—It is true that children may marry, and that in such an event, they will have their own financial burdens to meet, but this fact should not absolve them from all obligations to the parents who have given the best years of their lives to their care and education.

So long as a parent is dependent, that dependency should be placed upon the children, if there are any living. In order that the parent may not be an incubus upon children, a better method of meeting the old-age problem should be found than that which commonly obtains.

In the first place, from early childhood, children should be taught the nature of their obligations to their parents. As soon as they are old enough to understand this problem they should aid the parents in trying to solve it, not merely for the benefit of the parents but for the good of the children themselves.

As an illustration, the old saying that "There is no roof large enough to cover two families," is in intent a pretty wise old saw. Children who marry should not be encumbered with the care of parents under the same roof. They have a right to their privacy and parents are also entitled to live their lives alone. Normally one of the greatest mistakes parents can make is to live with a married daughter or son. Volumes could be written upon this subject but it is not necessary. The question is how to prevent such a necessity.

In the first place it should be understood between parents and children, that the death of the father means that the bulk of the property accumulated goes to the wife, or *vice versa*. Also that the death of both parents means that the property is to be divided equally between the surviving children, or that, if the care of the parent or parents falls upon one of the children, that one shall be reimbursed for such care out of the estate first, and that the remaining portion is to be divided equally between the surviving children. What the children do for the parent or parents then does not become a matter of charity or an obligation on anyone's part. If there is property such obligations will ultimately be repaid.

As soon as children are able to work, or when they do become sufficiently independent economically, if they continue to live

under the parental roof, they should pay a reasonable sum for board to the parents. This sum may be applied to the old-age fund, or if it is not needed it may be invested and returned to the children at marriage or later in life.

Aside from the above, children when economically independent, whether living with parents or not, should contribute a minimum sum weekly or monthly to this old-age fund. A bond of a certain amount may be purchased by each child and paid for in monthly instalments. Bonds may be had in denominations of one, two hundred and fifty, five hundred and a thousand dollars each. The small monthly payment would hardly be felt by most young people earning a fair salary. When they marry and their obligations become heavier the payment may be reduced and when a sufficient amount has been accumulated with which to protect the parents and make them economically independent the payments may cease entirely.

Where the united efforts of parents and children have saved a generous amount, the interest alone may be sufficient, and perhaps the capital may never be touched. In the latter case, the principal should be returned to the children according to their apportionments at the death of the parents.

In any event, and under all circumstances, the child that contributes to the support of parents should be reimbursed out of the parents' estate, before a general equal division is made among the surviving children.

If parents have no property and nothing but an insurance policy to represent their savings, they have a right to expect one or more of their children to keep up the premiums (if it is not a paid-up policy), and also to care for them. The amount so paid and contributed may be deducted from the policy at maturity, or it may be understood that the full amount of the policy goes to the one who assumes the responsibility for the old folks' care. If some of these suggestions were put into effect, there would be happier families, fewer old folks' homes, and little destitution among the aged.

Possessions of the Aged.—One of the very worst experiments aged persons or those advanced in years can make, is to deed their real estate and convey their personal property to children. While it may be fully understood that their property is to go to the children at the death of the parents, no such disposition of either real

or personal property should be made during the life of the parents. No matter how loving and kind children may be, the human equation must be considered. The old father or mother with a few thousand dollars at personal disposal is always a little bit more welcome at the fireside of the favorite child than the parent or parents who sit there because they have no other place to go, and no choice to make.

A young man is anxious to go into business. He is very sure of himself and his prospects, and his glowing eloquence easily moves the fond ear of the aged mother and father. Their little store is soon staked on the enterprise, but the son's judgment is not what it should be and it is soon discovered that the experiment has not been a success, and father and mother are now entirely dependent upon the care of the children. It is too late for them to begin all over again.

It is a pretty safe rule not to do business with friends and relatives. Old people should firmly make up their minds to hold the bulk of their possessions in their own name so long as they live. They should leave the matter of investments entirely in the hands of a reliable banker, and no financial move of any importance should be made without his advice and consent, and if it is made it should be supervised and put into execution by such a banker.

Not Entirely an Individual Problem.—Provision for old age, while directly dependent upon the family, needs to be supplemented by aid from the employer and from the state.

The citizen is a ward of the state, and the state requires for its own protection that its citizens receive at least an elementary education, and so we have our compulsory school laws. As a further protection against becoming a public charge in case of misfortune and extreme poverty, the same line of reasoning may be extended, and the state be urged to provide against such contingencies by a government pension fund.

On the other hand, this burden should not be thrown entirely upon the government any more than upon the individual. The employer should be expected to contribute to such a pension fund. Many thousands of persons devote the best years of their lives to the interest of their employers. They may have specialized in some form of work that unfits them for other lines of endeavor, and through years of service they have contributed to the building up and growth of the employer's business. Can such loyal and continuous service on the part of employees ever be compensated for in the form of a wage only?

a man after twenty to thirty years of faithful service for yer has been dropped out of service in order to give place nger man. Unable to secure work in his special line, and o learn a new trade, he becomes a dependent either upon r relatives, unless a competency has been acquired. Eco- nditions often make it impossible for men of families to it is not always their fault that such conditions find them n old-age fund to protect them in later life.

such conditions that to-day demand that the employer con- is share to a pension fund for employees.

kmen's Compensation and Pension Funds.—There is plan that has been adopted as a standard by American s to take care of this situation. Many employers have a pension system. Such systems usually require that the s deposit with the company a certain per cent. of their go into the pension fund for their own protection, and for llar so saved, the employer agrees to deposit a certain for the same purpose.

r forms of compensation for workmen are the profit sharing at have been adopted by many of the larger business con- Over 200 such plans are now in force in this country. They lassified into three general groups as follows:

distribution of a specific proportion of the net profits advance.

ratuities made by employers from time to time.

pportunities given employees to purchase stock in the con- der specially favorable conditions, not available to the public.

t sharing in this country was first tried out in 1867. The first introducing it paid their employees 25 per cent. of profits. Some companies that adopted this system as early still continue it, but many have abandoned the plan as a

employers who have tried it think that it promotes con- service, more regular attendance, a better spirit of co- n and that it reduces the cost of production. Others are ed as to its value. Strange to say most objectors to profit come from the ranks of unionized labor, who evidently icious of the motives of employers who adopt it, and who erhaps as a rival of Unionism.

Government Pension Systems.—As early as 1772 provision for annuities for the aged poor was proposed in England. What some nations have done in the form of Government pensions is shown as follows:

GERMANY: In 1891 Germany adopted a compulsory and contributory system of pensions. The employee and the employer are compelled to contribute a certain amount, to which the government adds its share.

DENMARK: In this country, the pension fund is supported by both local and national taxes, and both sexes over 60 years of age are provided for, supplementing any private help that may be given to the individual.

NEW ZEALAND: This country pensions the deserving poor over 65 years of age. Assistance from other sources and private property owned by the individual is taken into consideration in awarding the amount of the pension. A similar plan is in operation in Victoria, Australia.

GREAT BRITAIN: The pension system of this country is non-contributory; that is, it is not dependent upon contributions from the individual or employer. Those over 70 years of age, whose income does not exceed $105 per year, are paid $1.25 a week, and a graduated scale of benefits is applied to those having incomes above $157.50 per year. This system applies also to paupers in work-houses.

FRANCE: This is a contributory system, and it provides pensions for all those above 65 years of age whose income is under $600 per year, the highest pension amounting to about $82 per year.

UNITED STATES: No such system exists in this country as yet, but it is only a matter of time before some provision must be made for the pension of the aged indigent. Probably such a system should provide for compulsory insurance against old age on the part of the individual, and contributory insurance on the part of the employer, supplemented by governmental aid.

Summary.—If some family plan for protection against old age, such as that outlined earlier in the chapter, were put into effect during youth or even in middle age, and if children, before their responsibilities become too great assume their share in building up an old-age fund for the parents, they will come to look upon it as an investment and not a hardship, an act of charity or a duty. What they contribute added to what the parents already may

have accumulated, together with interest, should prove an incentive to any right-thinking child. With some such plan in effect, parents may live their own lives in their own way until the end. It will not be necessary for them to break up their home in order to live with one of the children, and with a compulsory system of contributory insurance on the part of the employer and federal government in effect, in case of actual necessity the questions of support during old age will be answered.

This is a problem that has not yet been solved or placed upon the right economic basis.

QUESTIONS

1. What three vital items in the Family Budget relate especially to the subject of old age?
2. Why should there be an "old age" fund, aside from and independent of other provisions made for acquiring a competency?
3. Are children under moral obligations to support parents unable to care for themselves?
4. Should parents live with a married child? If not, why not?
5. Should parents transfer their property to children as an offset to their own support for the rest of their lives?
6. Should children who are earning and living at home contribute to the maintenance of the home in the way of board?
7. If so, how should the amount of board be determined?
8. If a parent has no property other than a life insurance policy, should the children be asked to meet the premiums on the same. If so, why?
9. In what way should children help to make provision for the old age of parents?
10. Can this be done in a manner that will ultimately return to the children the expenditures made in behalf of the parents?
11. Should parents loan their earnings to children for any purpose?
12. How may old people be safeguarded against making unwise investments?
13. What is meant by "contributory pension systems"?
14. By compulsory old age pensions?
15. Can you name any business or industrial concern that supports a pension system? If so, give the details of the plan.
16. Can you name any concern supporting a profit-sharing plan? If so, give details.

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CHAPTER XXIX

HIGHER LIFE AND CULTURAL WANTS IN THE FAMILY BUDGET

ECONOMISTS find that from 10 to 30 per cent. of the income goes for the expenditures for "Higher Life," a smaller percentage with smaller incomes, and as the income grows the percentage increases. This allowance is for education, culture, recreation, savings, medical and miscellaneous personal expenditures. Two of the most important of these expenditures are those for education and recreation, and they will be made the topics for this chapter.

Little attention has been given to the expenses involved in the education of children when the subject of family budgets are under consideration, and yet there are many factors that add to the family expenditures in this particular that might be eliminated. The subject is a very broad one and it is almost impossible to discuss it without stepping beyond the financial aspects of the question involved.

Kindergartens and Special Schools.—In analyzing the expenditures of nearly every American "middle-class" family it is astounding to find that not a small portion of its expenses may directly be charged to "snobbishness." In other words, the desire to keep up appearances; to ape a neighbor having a much larger income; to strive to attain an intangible social status; these attempts and ambitions, built upon false standards, are a heavy tax upon the pocketbooks of thousands of families. This fetish, for such it becomes with many wives and mothers, and with some husbands and fathers, finds expression in every item that makes up the family budget, and education is not the least important outlet for this unnecessary leakage.

There are thousands of families who feel that they must send their small children to private kindergartens. Many of these private kindergartens furnish transportation for the children, while others do not. It is, however, not sufficient for such families to allow their children to walk to these schools, or even to ride in the wagons furnished by the schools, but they must be carried to and from school in a private cab or auto.

The public school system in nearly every city and town of any ze has established kindergartens which may be attended by children suitable age, *free of charge*. Snobbish parents, perhaps, would ot think of sending their children to a public kindergarten, and snobbishness must pay for private tuition, and snobbishness ust pay for special and private transportation, all of which is no nall item of expense.

Correspondence Courses.—There is much waste in corre- ondence courses. Many start such courses and never complete iem, because the wrong course was selected, or because the plan id requirements of time were not well considered in advance. While ie best of them are to be commended for adults who cannot other- ise satisfy their thirst for knowledge through directed and super- ised study, they are "makeshifts" for many who take them.

Special Lessons.—Another great leakage in the average Ameri- an family is the "special lessons." Daughter must take painting essons and son must have his music lessons. Mother must have a ourse in self-expression, and father must study Spanish.

The writer is heartily in favor of education and of culture and all that contributes to culture, but it is the misdirected energy that constitutes a great drain upon the economic life of the family and of the community with which fault may be found.

The public schools are teaching and teaching well the subjects of drawing and vocal music. If a child has artistic ability it may find its early expression through classes in the public schools. The undamentals at least may be gained in these classes without resort- ng to private lessons.

Aside from this fact, one should take issue with the ambition a parent that starts a child on a course of instruction in either usic or art, regardless of whether or not that child possesses a lent in that direction or even ordinary taste and ability. It is, course, desirable that every child be given opportunity to learn play and sing sufficiently well for the edification of its family and iends as well as for its own enjoyment, but there are thousands children taking lessons in such subjects who never will be able paint a picture worthy to be hung upon a wall; or to sing or play selection that would please anyone but a fond and doting parent. f a child shows any aptitude for an art, by all means give it an pportunity for developing and expressing its talent, but there is no more excuse for giving private lessons in such subjects to the

average child than there is to teach it the principles of blacksmithing. Here then is a tremendous leak in the economic life of the nation. A statement was made some time ago in the public prints as to the amount annually expended for music lessons in the city of Chicago. The figures were so startling that they should not be quoted here without verification, but they ran into six figures, and this expenditure represented private lessons only. There is, for instance, in this city and perhaps in other cities, a directory containing thousands of names of music teachers, and yet how many of their pupils have become known to the public as musicians, and how many of them have received value in full for their expenditures?

If one would economize, then one should be sure that the child has at least enough native ability to appreciate an art and to insure persevering study before much money is put into private lessons, and it is a simple matter for a child's ability in music to be tested by some unprejudiced teacher who will at once say whether there is any remarkable talent there that should be cultivated. It is a service which the public school teachers of music are ready to render in many instances.

Elementary Education.—Every child is entitled to an elementary education, which consists of eight years in the grades.

Taking it for granted that the American school system is to be patronized and upheld, it should be understood that the parents are not going to spend money on special schools which may create undemocratic distinctions.

In the first place, a school child should not be overdressed. It should not be taken to school in an auto if it can ride to and from school in the street cars, unless the distance is prohibitive. Carfare for school children is no small expense. Country children often walk three and four miles to school, taking their lunches with them. City children who live too far from the school to return home should likewise carry their lunch, unless the school provides a cafeteria at which a lunch may be had as cheaply as it would cost to put one up. Even a slight increase in cost is justified because of the better nutrition possible with the warm lunch.

Unless closely supervised and intended for legitimate necessities, school children should not have allowances and an attempt should be made to so dress them and regulate their conduct that they will not stand out from the rest of their playmates, or as representatives of a class above the average. These things may not seem germane to the subject of household finance but they are very

tly related to it. If there are children in the family a proper eciation of these principles means a considerable reduction in amily budget.

econdary or High School Education.—There are many ns why it is desirable for every child to receive a High School ation, but the mistake that many American families are making e fact that they consider the "diploma" as the end in view. e are many caustic criticisms being made of our public school m and some of them are justified; but we must remember that public schools are still in their infancy and that an honest ipt is being made to better conditions. Many of the deficiencies at the door of the schools may be attributed directly to public on and public snobbishness.

he High School still stands for that mystic something called ture," and while it has introduced manual and household arts, still chiefly an institution for feeding the universities and er institutions of learning. What culture is, is still a debatable ion. That it may be acquired without a high school or college ation is now admitted.

Ve are concerned with this subject only as it affects our finan- status. Statistics prove that as a rule the broader and the complete a man's education, the greater will be his earning city. This is a general statement and it does not mean that are not exceptions to the rule. There are, however, thousands ildren, not capable of assimilating the usual course of the al High School. Parents dislike to admit that their children ot the equal of their neighbor's children who have mastered courses, and so they persist in forcing their own children gh these courses, even though it takes their children six years ish a course planned for four years' work.

)ne real purpose of schooling is to help young people to find heir capacities and to develop their special talents, if they have when they do find themselves. If a child is able and inclined through the four years of high school cultural work without e labor and continuous urge on the part of the parents, well good. It should have the opportunity, but if the desire and illingness and the ability to master these courses are not present, arent should be satisfied with two years of high school cultural . If more opportunities can be afforded, the child should then two years of special work in an occupational study, such as

commercial work, including bookkeeping or stenography; or in a trade school in which the fundamentals of a trade may be mastered. Many such special courses are now offered by most large high schools.

Every day in school means the probability of added ability, wealth and perhaps happiness later in life. The vocational schools are offering opportunities to boys and girls that cannot be evaluated in dollars and cents. The Federal government has recently made a very large appropriation to aid vocational training in the public schools, and the day is at hand when every boy and girl will be expected to make special preparation for the particular occupation which he or she expects to follow in life.

If parents are financially unable to see their children through high school, every boy and girl, under such circumstances who values an education, should endeavor to work his own way through school. The completion of a high school education is the key that unlocks the door to nearly every desirable special school or institution of higher learning, and every effort and much sacrifice should be endured to gain that key.

Thousands of dollars are annually expended needlessly for a so-called education that does not fit one for real life, or in other words, life's real work.

Higher Education.—By this is meant college and university education. Some American families seem afflicted with a veritable mania for putting their children through college. The sole idea seems to be that a college training furnishes an opportunity of raising the social and business status of the college graduate. It may mean an introduction into society for the daughter. It may mean that the son will associate with the sons of millionaires and later in life form financial alliances otherwise impossible and closed to the average young man. It is a great mistake to teach our children and to hypnotize ourselves with the delusion, that social ostracism awaits the non-college trained youth and that business opportunities and professional honors are impossible, or will be impossible, without a diploma from some college or university.

This is a dangerously false standard to adopt. It means the establishment of an intellectual caste. Such a point of view is wrong, of course, and it can only result in harm to the cause of education. Those who enter college with such ideas rarely "make good" and they constitute a class that well might be called the

"parasites of society." A college training is highly desirable, but it is by no means vital or necessary to any individual. Real success can be had in any and every line of endeavor without it. There are thousands of college graduates eking out an existence on a mere pittance as clerks, but that does not necessarily condemn the value of a higher education. On the other hand, there are thousands of our most successful men who never have had a high school education.

One should not be governed by exceptions to general rules—and the general rule here is that higher education for the boy or girl *who values it* will pay both the individual and society. The American people have been accused of superficiality, and if there is one institution above all others that will cure that trait it is the American college and university. College should be the goal of every American boy and girl. Because others have failed; because others have a mistaken and wrong attitude toward higher education and its purposes, should not daunt one from a determination to finish a college course, and even though it cannot be done uninterruptedly, there is no reason why one should abandon the attempt. Our colleges show an occasional man and woman past middle age who is finishing courses, perhaps begun in their younger years.

In considering the question of finances, one should look upon this subject in a truly liberal spirit. To send a son or a daughter through the university for the average parents, entirely at their own expense, means a long sacrifice made up of many petty economies seldom appreciated by children. Unless one has more than the average income, the majority of parents should expect that both son and daughter will contribute through their own efforts to help pay the expenses of a college education, if it is desired. Young men and women should not be sent to the university unless parents are sure they will assimilate the culture such an education aims to give, or unless that education is going to contribute directly toward fitting them for some vocation or profession.

In any event, it is not necessary to furnish high school or college students with allowances for personal indulgence. It is not necessary to provide them with all the luxuries enjoyed by the sons and daughters of wealthy men. It is not necessary or desirable for parents to assume all of the burden of a college education.

Children have a right to expect that their parents and the state will provide them with an educational foundation upon which they

themselves may build later in life. Beyond this, they should depend largely upon their own ability and energy. If parents can help, well and good, and if they do help, much may be saved by ascertaining early the mental capacity of the child to assimilate the studies proposed. If a broad, cultural, higher education is beyond the means of parents to give or of children to assimilate, the latter should confine their education after the second year of high school work to preparation for life itself by learning some trade or by mastering some special occupation.

Children should have as much education as they are capable of, but they should not be forced or compelled to take courses for which they have no capacity or which they have no ability to master. The purpose of the schools is to help them find themselves as early as possible, and to prepare them in some practical way for living. The highly cultural studies should be reserved for those who have the ability and the appreciation necessary to master them.

RECREATION

A large part of a child's education comes through his association with his fellows. It does not stop when his books are closed. Whatever amount of the budget be set aside for "Education" in its varied forms both for children and adults, there must be some allotment also for recreation. As recreation, intelligently indulged in must result in better health for the family, at least one-third of the amount that otherwise would be allowed for doctor bills may be included.

Whether the expenditure allowed for wisely-directed recreation be large or small, the net returns from the investment will be found to be beyond all proportion in relation to the other items in the budget.

"All work and no play makes Jack a dull boy" is both physiologically and psychologically true, not only of Jack but of Jill.

One of the most pertinent criticisms of American life is our seeming lack of leisure and inability to play. Although we may be thankful that we do not have the so-called "leisure classes" of European countries, we nevertheless may learn from them. In fact, we have been learning the value of recreation and true culture. The business man no longer works incessantly, looking forward simply to a cessation of labor later in life when he may retire from the activities of the commercial world and revel in the cultural

pursuits of a Utopian future. He has learned, rather, to mix his recreation and culture, with his daily tasks. Recreation is just as essential for the body as education is for the mind. In fact, in modern life provision for recreation is as important as that for education. Educators are finding it necessary actually to teach our children how to play and to direct their play; and play is now used as a medium for self-expression and for teaching both the utilitarian and cultural subjects of the classroom.

The time was, when many men prided themselves upon the fact that they had not had a vacation in ten years. To-day, the employers of such men know that the time lost in a vacation is not a liability but an asset. Opportunities for recreation are becoming part of the budget of successful business houses, and the time has come when it must be recognized as a vital factor in the family budget; not from the point of view of expenditure, alone, but also from that of return on the investment, in the way of renewed vigor and energy and greater earning powers.

Recreation a Mental and Physical Necessity.—Much is being written regarding the dangers of fatigue, and the nerve specialist warns us of depleted and exhausted "neurons." We know that physical exhaustion means mental stagnation, and that nerve exhaustion often brings about physical conditions that permit auto-intoxication, or a poisoning of the body from the results of its own improper functioning. All these terms refer to conditions which may arise from over-work, long-continued strain, or ceaseless monotony.

It is said that even a machine becomes tired. A barber will tell you that he must rest his razors. Some metals are even susceptible to changes of atmosphere. Molecules of steel become disorganized through constant use, and if the pressure and temperature of the atmosphere can affect metals, it is obvious that the functional activities of the human system must be still more susceptible to environment, and to continuous wear and tear.

It is not only the body that tires, but that mysterious something we call "mind" seems also to demand at frequent intervals a cessation from activity. The influence of the mind upon the body is almost too patent to need mention, but it must not be lost sight of in studying the question of recreation.

Change of Occupation a Rest.—One of the most important principles to consider in this connection is the well-known saying that "change of occupation is rest."

One does not need to cease from work in order to rest, or to find recreation. Change of occupation may bring relief, amusement and recreation. To carry out this principle, however, an employment of entirely different character should be assumed. A sedentary worker, such as a bookkeeper, should not attempt to find his recreation in literary work, but he may well afford to spend an hour a day at physical toil in the garden or in sawing wood. There is a practical limit, however, to this theory of changing work for rest; if one is exhausted with any kind of work one needs rest, not more work.

Combining Culture with Recreation.—A great mistake is made in assuming that a vacation cannot be enjoyed or suitable recreation taken, unless in the conventional way. A formal dinner party; a week at a fashionable resort; a tour of the far West; a trip to Europe; a summer at the seaside; a camping trip—all may be cited as illustrations of many persons' conceptions of recreation.

It seems, on examining the conditions, that there is even more necessity of directing the play of the adult than that of the child on the playground. It is just as possible to make one's vacation of cultural value as it is to make it merely an excuse for letting down the bars of self-control, or of following in the rut of convention. A vacation should not be purposeless or aimless, or indulged in merely for the sake of change. The vacation should be planned and directed with some aim in addition to that of rest.

If the vacation is to be taken away from home, why go every year to the same resort, and why do the same things over and over again? Why not intelligently plan to see as many parts of our country as possible, and at the same time satisfy one's love for fishing, hunting and camping, or hotel life if that is what one desires? The great natural parks preserved by the Federal government, the wonderful canyons of the West, the beauties of New England scenery are all worth the expenditure of our time and savings. Even if, as is probably true of the majority, one never goes very far beyond the confines of one's own state, yet visits to the nearby large cities, one by one, and year by year, would have something of educational as well as recreational value. If such trips are beyond the resources of an individual, there are the nearby attractions of forest and stream and lake, and the nearby cities and towns, often within trolley ride of each other. Perhaps we know little of the city in which we live and of its environs. Weeks

may be spent in a large city exploring its mysteries and resources. Very few citizens of Chicago or New York are thoroughly familiar with their home city. An hour's ride from the heart of Chicago will bring one into forests primeval, or into fields carefully cultivated and planted to grains, plebeian vegetables or covered with a riot of flowers. In one section of the city may be seen life as it is lived in the cities of Poland, and in other sections the streets are teeming with the peoples of Italy and Greece and of nearly every other civilized country, all living their lives as nearly as possible as though they were in their native land.

Whatever be the form of recreation, why should it not be intelligently planned with a definite view of learning, of gaining new experiences, of seeing new sights and new environments, as well as to secure merely passive rest or conventional amusement.

The Danger of Unsupervised Vacations.—Too much cannot be said of the danger that confronts the young girl-worker whose vacation is a week or two at some nearby summer resort. For months money is saved and scrimping economy is practiced that new clothes may be purchased and expenses provided for the trip. In such cases it is almost impossible for the mother or an older member of the family to accompany the girl, and so she goes unchaperoned.

At such resorts, respectable as they may be, young people are disposed to throw off the restraints of convention. Introductions at such places are not deemed necessary. Girls meet strangers whom they never expect to see again, and often extend to them privileges they would not allow an old friend at home. Were a stranger to speak to such a girl upon the streets of her home city, she would resent it, but here for some reason or other it is quite the thing. And so, idle and silly flirtations ensue that often lead to bitter consequences, and the price paid for the two weeks' vacation is more than life itself may ever be able to redeem. A thorough study of this whole problem of recreation for the masses should be made, and each individual can do a part of this work by studying his or her own problems of rest and recreation.

Health Dangers Through Recreation.—In leaving the schoolroom, the home, the office and the store for out-of-door vacations, one is liable suddenly to throw off restraints, plunge into active sports and indulge in physical efforts not in keeping with normal conditions that obtain during the greater part of the year. The result is often disastrous.

One should plan a vacation gradually, weeks before it is due, so that at the last moment there need not be many details still unattended to, resulting in a nervous tension that does not contribute to the first day's trip. Due time should be taken for settling in new quarters and surveying the surroundings before entering into strenuous activities.

Climbing, hunting, walking, swimming and all sports should be entered into gradually until one has become accustomed to such changes.

The heat of the sun is a real danger to those not accustomed to out-of-door life. Change of water often causes temporary illness, and quite frequently the drinking water at summer resorts is not all that it should be. Typhoid is often contracted from the drinking-supply furnished at such places. Until satisfied that the source of such supply is free from contamination, it is well to drink bottled-waters, or boiled beverages. Typhoid inoculation is desirable.

Another very real danger is contamination from water, in which large numbers of people bathe daily. During the summer of 1916 in Chicago, the unusually hot weather drove thousands of people to the lake for bathing purposes. The lack of wind and moving air prevented much movement of the lake water, and the result was that a number of bathers contracted incurable diseases from which more than one died.

One should not allow the vacation to be spoiled from worrying about every possible source of contagion or contamination, but reasonable precautions should be taken to avoid needless dangers and to guard against excesses of all kinds, especially during hot weather.

What Constitutes Recreation.—Having assumed that the purpose of recreation is rest of both body and mind, and all that that includes, we may ask ourselves, "What is it that constitutes recreation?" The question in part may be answered as follows:

First: That which contributes to the recuperation of the body.

Second: That which brings rest and refreshment to the mind.

Third: That which adds to one's cultural assets.

Absolute inactivity may rest both mind and body, and yet even physical activity may accomplish the same result and at the same time build new tissue, strengthen flabby muscles and restore tone to the nervous system.

Sleep and mental inactivity for a time may prove a panacea for nervous conditions, and physicians do recommend absolute rest

ı cases; but for the normal individual, needing a vacation, o unexperienced or an unexpected mental stimulus may ve the same purpose, and in addition, result in the accumu- cultural assets of inestimable value.

rent Phases of Recreation.—Recreation, then, may par- ıe nature of any of the following phases:

· Complete physical passivity.

d: Complete mental passivity.

: Physical activity.

h: Mental activity.

: Partial physical passivity combined with intelligent and nental activity.

: Partial mental passivity combined with intelligent and physical activity.

y event, recreation should be a change from former con- ıd habits. *Monotony must be broken.* New tasks must be en. New environment should form the theater for new . *Complete physical or mental passivity should be only under the immediate care of a physician.* Otherwise, ' stagnation."

rent Forms of Recreation.—The following forms of recre- y be mentioned as a basis for a more extended study:

ICAL ACTIVITIES:

Athletics.

(*a*) Out-of-door games.
(*b*) In-door games.
(*c*) Gymnasium work.
(*d*) Riding.
(*e*) Swimming.
(*f*) Walking and running.
(*g*) Boating.
(*h*) Dancing.

Work.

(*a*) Gardening.
(*b*) Any physical work.

'AL ACTIVITIES:

Amusements.

(*a*) Theater.
(*b*) Movies.
(*c*) Parties and socials.
(*d*) Mental games.

2. *Cultural.*
   (*a*) Lectures.
   (*b*) Concerts.
   (*c*) Music in general.
   (*d*) Reading.
   (*e*) Literary work.
   (*f*) Hobbies.

INVOLVING CHANGE OF ENVIRONMENT:

1. *Travel.*
   (*a*) Motor, driving or horseback trips.
   (*b*) Trolley trips.
   (*c*) Extended trips by rail or boat.
   (*d*) Extended walks, or bicycle trips.
2. *Out-door Activities.*
   (*a*) Summer resorts.
   (*b*) Seaside and mountain resorts.
   (*c*) Fishing.
   (*d*) Hunting.
   (*e*) Camping.
   (*f*) Country life.

In the consideration of a vacation, or of any recreation, one should take into consideration the necessity for both physical and mental activities, and rest, as well as for change of environment combining both in-door and out-of-door forms of amusement.

Systematic Recreation.—Recreation should be systematic, and not hit-or-miss indulgences. A real vacation should be taken at least once a year, whether it be for one or more weeks, or for an entire month. Usually the husband's vacation should be that of his wife also. If there are self-supporting adult children living at home, the family may combine their resources and take their vacations together, although under right conditions for each, a variety of interests brings back to the home a larger life in the manifold experiences undergone and related after the family is again united. Brother on a motor-trip; sister at a summer resort; father hunting and mother at the seaside may be an extreme illustration, but there are families in which vacations are spent somewhat on that plan. The expense for a single individual is always greater in proportion than for a party, and sometimes a much better time could be had if all members of the family combine their resources and spend their vacations together. Of course one objection would be that a single

lace might not satisfy each member of the party, while another bstacle would be the difficulty of securing vacations for each work- ıg-member at the same time. These objections, however, are not ısurmountable and the greatest good to the greatest number, for ıe longest time should be carefully calculated.

The summer vacation should be looked forward to and planned ›r during the rest of the year, but money laid aside from month › month for this purpose should not be allowed to interfere with ne's regular savings fund. If a trip away from home is not pos- ble, there are many other ways of having a good time, if one is illing to look for ways and means.

Other recreation than the summer vacation is necessary and one hould not be satisfied to scrimp and save all the year for a week r two away from home and thus to be denied all pleasures during he rest of the year.

The year's program may well be outlined season by season, or nonth by month. The summer vacation may be assumed to take are of that season of the year. The fall, winter and spring seasons should now be considered. With fall and winter come the opera season and the drama; dances, parties, concerts and socials. If one is especially fond of the opera, the drama or of concerts, why not plan to attend a series of one or the other as the main diversion of the fall and winter seasons? Then in addition, the dance, the party and the activities of Church, Club or Lodge are not to be forgotten. With the spring, long walks into the country, trolley rides, picnics, excursions and gardening furnish sufficient oppor- tunity for a full program. So with a little forethought one may easily plan ahead for the entire year, somewhat as follows:

Summer Season: Annual vacations.

Fall Season: Concerts, lectures, drama, club and church ac- tivities.

Winter Season: Theater, dances, entertaining, club, and church.

Spring Season: Neighborhood excursions and gardening, in addi- tion to those mentioned above.

"The Movies."—The above are the major activities, but there is also the round of anniversaries, birthdays, special family days and holidays, which bring pleasant occasions into almost every month, and suggest as the next problem, that of the monthly and indeed a weekly program. For this the movies are not to be despised. In

every city there is seldom a week that does not witness in some one or more moving-picture houses a screen-picture of unusual worth, such as Dickens' "Great Expectations" or Hawthorne's "Scarlet Letter." The announcements of the more important houses are usually printed in the city papers. In this way many of the great standard novels and plays may be witnessed at a small expense, and a visit to picture houses in unfamiliar quarters of the city may add zest to the occasion. It is a habit not to be despised to take one night every week and visit some good picture show. Grant that such recreation is plebeian in the minds of some people, yet a good moving-picture is far preferable to a poor and perhaps coarse "show" for which one would have to pay not less than a dollar a seat. Real culture may in this way be secured with good and cheap amusement. Discrimination, of course, must be exercised in choosing this form of amusement as in all other things.

Some standard of judgment is necessary in selecting pictures to be seen. One of the best rules is *to see no story-picture that you would not be willing to read in book-form.* How many of us would be ashamed to be seen reading the stories we spend hours of time viewing on the screen! But what an intellectual treat we may have if we could see one really good standard novel or play each week depicted upon the screen, with an occasional real drama on the legitimate stage.

Reading.—It is disheartening to watch the average street-car or suburban crowd, morning and night; men, women, girls and boys, all poring over the sporting-pages of the city newspapers. Such reading does not even have the merit of real sport as an excuse for wasted time! Then we have the office and shop-girl thrilled with the daily column of sentimental "advice" of some popular space-writer.

True sport should ever be encouraged but professionalism in sports is opposed to healthy, vigorous efforts in such directions on the part of amateurs. If the reading of the sporting page, or of so-called advice to adolescent girls, will lead to a further perusal of the solid news of the daily paper and an awakened interest in the affairs of the world, perhaps the former diversion may be pardonable.

The news of the day should be discussed in the home and that is possible only through newspaper reading, but discrimination should be exercised in what is selected for perusal.

Is there no longer pleasure and delight in planning excursions

gh the realms of our great English literature? Are our master-
s mere names to be conjured with in High School exam-
ns? An hour's vacation, every day of the year, might be
by everyone able to read, if one would deliberately plan the
ıg of the world's greatest stories. Recreation for the mind
would in truth be combined with culture.

ooks and Magazines.—The best advice to offer to those seek-
ading matter would be to suggest that one consult one's local
ian, or if the town is without a public library, to seek advice
the librarian in the nearest town or city that supports a public
y.

any states have traveling libraries in charge of a State Libra-
at the state capital, who is always willing to advise one in
l to reading material. Again, the public school system itself
supports small libraries; and valuable advice may be secured
the local school librarian or from teachers and principals.

he United States Government through the Bureau of Educa-
ıas supplied a great need in its Reading Courses.

word of caution may well be sounded against the reckless pur-
of books sold by traveling agents. Often the contents of such
are worthless, or when they are standard works, they are
ly bound in bindings that are made to appeal to the unsophisti-
purchaser, and sold at prices that perhaps should be prohibi-
o most people. If a set of Dickens was offered in fancy bind-
at seventy-five dollars a set, it would be better policy to invest
ıoney in three or four sets of standard authors in unpretentious
urable cloth bindings that could be purchased for that amount.
or those who desire to build up a showy library the purchase
mplete sets, that is, all of the writings of an author in a set,
be desirable, but for the average person it is better economy to
individual volumes.

ne should be wary of modern fiction, at least unless well ad-
as to its character and literary merit. It would be far better
ake a systematic attempt to familiarize oneself with the great
ry masters of English and other languages before dabbling
the more recent writers of fiction.

ibrarians are ready to assist, and refer one to books giving
e on the problem of selecting reading. If one has a taste for
ry, the standard books covering the subject should be read and
may well be supplemented by the numerous historical and
historical novels.

In the matter of periodical literature, a magazine of general review should be in every home. Such a periodical might be the weekly *Literary Digest,* or the *Independent,* or the *Outlook;* or a monthly such as the *Atlantic Monthly,* the *World's Work,* or *Review of Reviews.* If other magazines can be afforded, selections should be made to cover the individual needs of the family.

Next, a religious or denominational paper should be a part of the family reading.

A professional or trade paper may interest the father. If the man of the house is a farmer, a good farm paper is indispensable. Mother should be supplied with a good home magazine. Neither should the children be forgotten. There are many good children's periodicals, such as the *Youth's Companion* and *St. Nicholas,* and those given to popular science, such as *The Scientific American* and *The Geographical Magazine,* will especially interest the growing boy.

Finally, a daily newspaper should be included. Even on the farm, the large city dailies may be delivered not much over twenty-four hours old, or a weekly issue may be substituted; and they are to be preferred to small local papers, for aside from the news of the day, which in itself may be educative, the great dailies now contain a vast fund of valuable information on many subjects of interest to the family.

The family budget, if possible, should so be made as to allow for yearly subscriptions to a number of good magazines and papers, or to membership in a magazine club composed of neighbors who exchange their reading material. It should also allow for a monthly fund to be invested in the building up of a family library, and adding new books to those already possessed.

Much real recreation may be had from good reading, and this should not be neglected in the making of the family budget.

Games and Physical Exercises.—Too much can hardly be said in favor of daily physical exercises at home or at the gymnasium; of bowling; basket-ball; foot-ball and base-ball; motoring, bicycle riding; walking and swimming—all of them real sports that may be indulged in almost the entire year!

In conclusion let every individual and every family plan their recreations and vacations in advance, seeing that each week is supplied with some special diversion; that every day brings its own exercises, games, and rest; that each of the seasons has its own

program and that recreation finds its proper place in the family budget.

An occasional unexpected pleasure, a surprise in the day's program, is very desirable and beneficial, but on the whole, our diversions should be as well planned as our menus.

Simple pleasures and homely joys—these are the real recreations that furnish mental refreshment, physical renewal and spiritual growth.

Church Activities.—This subject should not be overlooked in the family budget, as relations to one's church and its services and social activities furnishes an important part of the social life of the average family.

Life-long friends are often formed among acquaintances banded together in the work of the church, and it bears a lasting influence in the lives of children.

The relation of the church to the community and to the world at large is vital. The charitable work and spiritual consolation offered to those in need, and the aid extended to churches in new communities and to foreign missionary work in extending religious influences into needy parts of the world, thus passing on the gift of religion which centuries ago came to our forefathers, and incidentally aiding in the world-wide movement of civilization—all this certainly represents a cause that everyone should be proud to contribute to.

Aside from questions of religion, the church offers many social advantages that are both recreational and educative. The societies supported by the average city church often numbers a dozen or more. Apart from the regular services provided by these societies, they each represent social activities of value to children, young people and adults. Socials, entertainments, lectures and concerts, picnics and excursions, to say nothing of the regular activities staged in the parish house or church parlors, provide healthy recreation of the highest type.

Charity.—Charity and philanthropy, like religion, has a right to demand recognition on the pages of the Household Ledger.

The church represents many charities, but aside from religious institutions, there are various organized charities to which every one should contribute. Benefits are often given to aid worthy causes, and these provide sources of amusement and recreation, at the same time making it possible for one to contribute a part of one's income in the support of such beneficent organizations.

The Public School Extension Work.—Of recent years, there has been considerable demand on the part of the public for the use of public school buildings for neighborhood activities during the hours when the buildings are unoccupied by classes. This movement has spread all over the country, so that now in many places may be found neighborhood clubs that hold their meetings in the school house. Dancing, games of many kinds; lectures, entertainments, and pictures; and the free use of the gymnasium and swimming pool for the general public, are some of the forms of recreation now represented by the public school.

A family can no more afford to be a drifter in a community than can an individual; but by identifying itself with the various community organizations, such as the church, the lodge, the club, with neighborhood and charitable organizations, a seemingly endless round of pleasures and recreational activities are made available.

Entertainment in the Home.—The complexity of modern life, combined with the rising cost of living, has made entertaining in the home, for many families, one of the most expensive luxuries. This should not be so, but we must face the facts as they exist. With other families this is not so much the case. A neighbor or friend is welcomed in the home without any advance preparation, and whatever is on the table is offered with the true spirit of hospitality and accepted as a matter of course.

But this is not the kind of entertaining found in many city homes of this generation. Extensive planning precedes the expected visit; the grocer and the butcher and the baker, the delicatessen and perhaps the caterer are called in, flowers are ordered and perhaps gowns refurbished, or if means are more limited the hostess works strenuously in preparation for the coming event. The simplest noonday lunch, when entertaining, becomes an elaborate affair, while the afternoon tea adds an additional burden upon the hostess who would scorn to be called a housewife. In such homes, simple games for young people are almost taboo. They have given place to formal dances that call for more or less elaborate toilets. Young men and young women feel called upon to ape their elders and the real spirit of youth is too often absent from our modern forms of entertainments. Such should not be the case.

"How can we avoid lavish home entertaining?" or rather "How can we entertain in a simple manner that will appeal to our guests?" are pertinent questions. "Given to hospitality" will not strain the budget.

With little effort, a family can soon give the impression that friends are always welcome in the home, and without formal invitation. Such a family soon will be known favorably for its hospitality and largely because the friends of the family all know that no special preparations are made for the reception of the casual guest. What is on the table for the family, is always considered "good enough" by the fortunate caller at such a home who chances to become a guest at a family meal.

And then there is the occasional evening's entertainment. If cards have become a daily habit, cards seem the only recreation to offer a guest, but such a recourse simply reveals the paucity of one's ability to entertain. There are other forms of entertainment besides card games, enjoyable though they may be, and besides there are many who do not know how, or care, to play cards.

Informal conversation sometimes seems a lost art, as is the art of reading aloud, and yet how entertaining an evening can be when the host or hostess or some guest proves to be a brilliant conversationalist! Surely there is enough of real interest in every community, and there is sufficient activity in the social, commercial, and professional world, as well as in the life of the nation, to provide material for discussion any evening throughout the entire year.

And what of music? Many families possess some one or more members of musical ability, if not of real talent in the vocal or instrumental field. Such favored individuals are far better equipped to entertain than many much advertised musical stars whom we pay to hear. The modern phonograph and the latest piano-players need no longer be considered as the producers of mechanical music, as the reproduction of vocal and instrumental music on these instruments is truly marvelous when properly handled. They also make possible the informal home dance, and so in a number of varied ways, home talent and home entertaining may be made a real treat. The "old-fashioned," but now re-born "sing" should become common.

The bringing in of the children's friends during the day, or for an occasional afternoon or evening, introduces the adult members of the family to a forgotten world. As the women of the family feel the need of entertaining women friends in the home, so the men of the household often delight in introducing their men friends into the family circle, and such interchanges bring into the home a breath from the out-door world, creating new interests and new things to think about.

Let all home entertaining be charged with simplicity, and one will be surprised at the pleasure and renewed energy derived from such social activities.

Simplicity should mark all forms of entertainment, except perhaps on special occasions. Let us have simple pleasures and homely joys; sweet converse and soft music; a good book; simple fare and a few friends, and with the opportunities all about us for games and sports and vacations, what more should one ask for in the form of recreations?

QUESTIONS

1. What is meant by the term Elementary Schools?
2. What is meant by the term Secondary Schools?
3. What is meant by the term "Higher Education"?
4. In what way does snobbery add to the cost of education in the kindergarten? In the High Schools? In the Universities?
5. What is meant by cultural studies? Is any study not cultural?
6. What does "utilitarian" mean as applied to education? Is any study not utilitarian?
7. Why are special lessons frequently an economic loss?
8. Is a High School diploma necessary to success in life?
9. What is the real purpose of High School Training?
10. What mistaken attitude is sometimes taken in regard to a college education?
11. Give a definition of the word "recreation."
12. Does your favorite form of recreation answer to this definition?
13. Would you call it a productive recreation? That is, does it directly contribute to physical or mental development and at the same time provide necessary refreshment both for the body and the mind?
14. Can you tell why change of occupation is said to be a rest?
15. What is your opinion of the "movies" as a form of recreation, or of education?

PROBLEMS AND DEMONSTRATIONS

1. Plan a program of recreation for the year within the standard of living of your own family.
2. Plan such a program more in detail with reference only to the coming month.
3. Make a list of the names of the best pictures you have seen on the screen.
4. Make a list of desirable places to visit during the summer within walking distance or accessible by street-car service from your own home. What means of education do these places furnish?
5. Make a list of any important or desirable places within the city limits of your own town that one should visit.
6. Why do you consider them important?
7. Make a list of books you have read during the past year, other than those read or studied as a part of your school course.
8. A family of three adults visits the motion picture houses, once each week, paying 15 cents admission each. How much does it cost the family per year?

9. Another family of three adults makes a practice of attending the regular theatre twice a month, paying $1.50 each for admission. Carfare amounts to ten cents each, per trip. How much more does it cost this family for this form of amusement than it costs the "Movie" family?
0. How many admissions to a 15 cent picture house could be purchased with the money spent each year by the "Theatre" family?
1. How can you save to buy six good books, six songs or records, or six games during the coming year? List the items you would like to buy.

THEMES FOR DEBATE

Resolved:

1. That a High School Education should be the minimum attainment for all young people.
2. That a College Education while desirable is not essential to the highest success.
3. That the "Movies" represent an economic factor of educational value.

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PART IV.

LEGAL AND BUSINESS STATUS OF THE FAMILY

CHAPTER XXX

SOME PHASES OF THE LEGAL STATUS OF THE FAMILY

A BRIEF study of the institution of the family, the maintenance of which justifies the study of household finance, should be made by every young woman and young man. Children are nearly all reared in families, and nearly all men and women live their adult lives as parts of families. Some knowledge of this institution is necessary in order that it may be successfully financed.

A study of the family may be made in terms of the relations of the individuals who make it up, or in terms of the larger community, or society at large, which surrounds the individual family. From the latter point of view, the laws which control the family are of first importance; from the point of view of its members, the purpose and characteristics of a good family life are of importance. The latter phase of family life may be here simply mentioned as regards one or two basic matters. Conscious ideals of an ethical and religious nature, which guide personal action and sustain in trouble; the organization of the economic and financial life of the family in accord with the partnership relationship between the two adults who establish it and a co-operative spirit between adults and children; the importance of finance, thrift and saving, but the greater importance of the quality of life secured by the family group; the proper meeting of community relationships, including those of intelligent and patriotic citizenship—all these and many other principles control the purpose and activity of a family life that is really good—good for its own members and good for the state.

What the state does for the family group can scarcely be measured—all that we enjoy in the form of social relations, in the enjoyment of home and property and in the protection of life and liberty, we owe to our country. One measure of one's country's

service to the family is in the laws adopted by state and nation which concern the family, and a few of these will be considered in a discussion of the legal status of the family.

Knowledge of the Law Desirable.—In contracting business relations the parties involved usually make themselves familiar with the legal status of the partnership or company about to be formed, as well as their rights as individuals and as partners in such associations; or, they secure legal advice to protect their interests in the newly-formed concern. Such a procedure, however, is not the rule with those who enter into marriage relations, which of necessity, more or less, change the legal status of the individuals who become parties to such contracts.

Everyone should become thoroughly conversant with the more general legal principles and important laws that affect the real and personal rights of the individual, whether married or unmarried. Children have rights in the property of their parents. The law affords them protection in the way of proper support, guardianship and education. Wives have special legal privileges and rights in the property of the husband and in his estate, so that it is important that one should be fully cognizant of the rights conferred upon one by the law of the state.

The Common Law.—The law of this country is based upon the English system of jurisprudence, with the possible exception of the law of Louisiana, which retains traces of a system of French jurisprudence. New Mexico, Arizona, and perhaps other states first colonized by the Spanish, undoubtedly show in present laws similar influence of Spanish jurisprudence. Specifically, the common law of England is the unwritten law of England, representing interpretations, usages and principles that have obtained and developed through the centuries in contradistinction to subsequent laws of Parliament and the recent decisions of the various English courts. Technically speaking, in this country we do not have a similar collection of unwritten laws, although the decisions of our courts are often based upon the common law of England.

The Federal Constitution and Legislation.—The Constitution of the United States is the basis of our written jurisprudence. It is a written agreement of general principles subscribed to by the original thirteen states, to which amendments have been made from time to time. Powers not expressly given to the Federal government by the Federal Constitution are reserved to the in-

dividual state governments. Many contend that the scope of the Constitution is altogether too narrow to meet the exigencies of present-day conditions, and amendments are frequently proposed, although not many have been adopted.

Congress is the sole law-making power of the Federal government. It is assumed that laws passed by Congress do not conflict with the Constitution. If they do, if action is brought in the proper Federal courts, such laws may be declared unconstitutional and therefore null and void.

State Legislatures.—Each state has its own legislature which makes the laws governing within its own jurisdiction. As is the case with Congress, laws are sometimes passed by state legislatures that are unconstitutional, and which may be so declared if action is brought in the proper courts.

Federal laws passed by Congress and those passed by the various states sometimes conflict, and such circumstances have been the cause of much discussion and trouble ever since the formation of the Union.

Legislation by Courts.—Neither Federal nor state courts possess law-making powers, but it is the function of the court in this regard to interpret the meaning and the intent of the law, and to pass on the "constitutionality" or validity of a law, also when its aid is legally invoked the court sees to it that infractions of the law are suitably guarded against by the punishment of those who are guilty of violations. Thus, it is within the power of a court to usurp by implication the law-making powers of our state legislatures and of Congress.

Laws Governing the Individual and Family.—Each state has complete jurisdiction over its own citizens within its borders, and of those residing or doing business within the state, with the single exception of those who violate the Federal law.

Laws regarding property, inheritance, contracts, marriage and divorce are passed by the several states, irrespective of each other, so that the law of one state may and often does differ radically from similar laws in other states. A marriage legally contracted in one state may be held by the courts to be illegal in another state, and the same may be true of divorce. For such reason there are those who urge that the Federal government take over jurisdiction concerning marriage and divorce, which, if done, would have to be through an amendment to the Federal Constitution.

As state laws may be changed with the session of every state legislature one should endeavor to keep informed regarding all important laws enacted from time to time, especially those that directly affect the individual and the family.

In the absence of specific laws, decisions are made by courts in case actions are brought, and these decisions are usually based upon previous decisions or upon custom and usage and the principles of the so-called common law.

Age.—Legal age is construed to be that period of life during which one is fully capable of exercising the rights and performing the duties of citizenship. This period is fixed by the laws of the various states, and when one has attained that age he or she is said to have attained his or her *"majority."* Prior to that time such persons are legally called *"infants."*

In most states the legal age of the male is twenty-one years, and that of the female is eighteen years. There are exceptions, as may be seen by reference to the various statutes. Having reached this period of majority, the individual may exercise the legal rights of the citizen. Prior to that time, however, one may not make a will, or, except in special cases, make contracts, hold in one's own name, or dispose of, real estate without the consent of a guardian or without an order of court. Neither may one exercise the rights of suffrage until legal age has been attained.

Infants.—In the United States, in most states, children cannot choose their own guardians until they are fourteen years old.

The parents of a child, so long as living, are its natural guardians and cannot be dispossessed from acting in such a capacity without an order of court. In the case of incompetency, cruelty, neglect, insanity of guardians, and divorce of parents, the courts determine the guardianship of infants and minors concerned. *The state is the real guardian of the child* and possesses the sole power to delegate its powers of guardianship to others.

As previously stated, "infants" cannot exercise any of the rights of citizenship, except through parents, guardians or through the courts.

Age of Consent.—The age at which a female is supposed to be capable of discriminating between right and wrong in relationship with the opposite sex is called the "age of consent." This age is fixed by law and differs in the various states. The purpose of such laws is to protect immature girls by throwing the blame upon

SUMMARY OF MARRIAGE LAWS[1]

State or Territory	License required	Marriage prohibited between—						*Minimum age		†Parental consent	
		First cousins	White and colored	Step relatives	Epileptics	Feeble-minded	Imbeciles	Men	Women	Men under	Women under
Alabama	Yes	No	Yes	Yes	No	No	No	17	14	21	‡
Alaska	No	Yes	No	No	No	No	No	21	18	‡	18
Arizona	Yes	Yes	Yes	No	No	No	No	18	14	21	18
Arkansas	Yes	Yes	Yes	No	No	No	No	17	14	21	18
California	Yes	No	Yes	Yes	Yes	Yes	Yes	18	15	21	18
Colorado	Yes	No	Yes	Yes	No	No	No	21	18	.....	.....
Connecticut	Yes	No	No	Yes	Yes	Yes	Yes	‡	‡	‡	18
Delaware	Yes	No	Yes	No	‡	‡	Yes	21	18	21	18
District of Columbia	Yes	No	No	Yes	No	No	Yes	16	14	21	18
Florida	Yes	Yes	Yes	Yes	No	No	Yes	‡	‡	21	21
Georgia	Yes	No	Yes	Yes	No	No	No	17	14	‡	18
Hawaii	Yes	No	No	No	‡	‡	‡	18	15	20	18
Idaho	Yes	No	Yes	Yes	No	No	No	‡	‡	18	18
Illinois	Yes	Yes	No	No	No	No	Yes	18	16	18	16
Indiana	Yes	Yes	Yes	No	Yes	Yes	Yes	18	16	21	18
Iowa	Yes	Yes	No	No	No	No	No	18	14	21	18
Kansas	Yes	Yes	No	Yes	Yes	Yes	Yes	17	15	21	18
Kentucky	Yes	No	Yes	Yes	No	Yes	Yes	14	12	21	18
Louisiana	Yes	Yes	Yes	No	‡	‡	‡	14	12	21	21
Maine	Yes	No	No	Yes	Yes	Yes	Yes	21	18	21	18
Maryland	Yes	Yes	Yes	No	‡	‡	‡	‡	‡	21	16
Massachusetts	Yes	No	No	Yes	‡	‡	Yes	‡	‡	21	18
Michigan	Yes	Yes	No	Yes	No	No	No	18	16	‡	18

Minnesota	Yes..	Yes..	No...	No...	Yes..	Yes..	Yes..	18	15	18	15
Mississippi	Yes..	Yes..	Yes..	Yes..	No...	No...	No...	21	18	21	18
Missouri	Yes..	Yes..	Yes..	.....	No...	No...	No...	‡	‡	21	18
Montana	Yes..	No...	Yes..	Yes..	‡	‡	‡	18	16	21	18
Nebraska	Yes..	Yes..	Yes..	No...	No...	No...	Yes..	18	16	21	18
Nevada	Yes..	Yes..	Yes..	No...	No...	No...	No...	18	16	18	16
New Hampshire	Yes..	Yes..	No...	Yes..	‡	‡	‡	14	13	18	16
New Jersey	Yes..	Yes..	No...	Yes..	Yes..	Yes..	Yes..	‡	‡	21	18
New Mexico	Yes..	No...	No...	No...	No...	No...	No...	18	15	21	18
New York	Yes..	No...	No...	No...	‡	‡	Yes..	18	18	‡	‡
North Carolina	Yes..	No...	Yes..	Yes..	Yes..	Yes..	Yes..	16	14	18	18
North Dakota	Yes..	Yes..	Yes..	‡	Yes..	Yes..	Yes..	18	15	21	18
Ohio	Yes..	Yes..	No...	No...	Yes..	No...	Yes..	18	16	21	18
Oklahoma	Yes..	Yes..	Yes..	Yes..	No...	No...	Yes..	18	15	21	18
Oregon	Yes..	Yes..	Yes..	No...	Yes..	Yes..	Yes..	18	16	21	18
Pennsylvania	Yes..	Yes..	No...	No...	Yes..	Yes..	Yes..	21	21	21	21
Rhode Island	Yes..	No...	No...	Yes..	No...	No...	Yes..	‡	‡	21	16
South Carolina	Yes..	No...	Yes..	Yes..	No...	No...	Yes..	18	14	18	18
South Dakota	Yes..	Yes..	Yes..	Yes..	¿Yes.	§Yes.	§Yes.	18	15	21	18
Tennessee	Yes..	Yes..	Yes..	No...	‡	‡	‡	‡	‡	16	16
Texas	Yes..	No...	Yes..	Yes..	‡	‡	‡	16	14	21	18
Utah	Yes..	Yes..	Yes..	No...	Yes..	Yes..	Yes..	16	14	21	18
Vermont	Yes..	No...	No...	Yes..	No...	No...	No...	21	18	21	18
Virginia	Yes..	No...	Yes..	Yes..	Yes..	Yes..	Yes..	14	12	21	21
Washington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Virginia	Yes..	Yes..	Yes..	Yes..	No...	No...	No...	18	16	18	16
Wisconsin	Yes..	Yes..	No...	No...	No...	No...	Yes..	18	15	21	18
Wyoming	Yes..	Yes..	No...	Yes..	‡	‡	‡	18	16	21	21

* At which marriage is legal. † Age below which parental consent is necessary. ‡ No specific provision; common law usually applies.
¿Prohibited when either of parties is incapable of entering into contract.
[1] From the *Chicago Daily News Almanac*, by courtesy of the *Chicago Daily News*.

the male, increasing the penalty for the infraction of certain laws when the crime is against one below the age of consent. After that age each sex is considered equally culpable in specific cases of wrong-doing, unless extenuating circumstances are proved to have existed.

In some countries the age of consent has been the marriageable age, which in turn has elsewhere been as low as thirteen years, but many of the states in this country have very properly raised the age of consent to eighteen years.

Marriage.—Marriage expresses the contract by which the parties agree to unite, as well as the legal status resulting from the union of the contracting parties.

The law fixes the rights of each member of the marriage contract and these rights cannot be abridged, abrogated or altered in any important particular by any agreement made before or after marriage.

One cannot enforce by law any promise of marriage; in other words, one cannot be legally compelled to marry, but suit may be brought for breach of promise.

The customs and laws of foreign countries governing marriage are often entirely unlike those in this country, if not directly in conflict. More than one innocent girl has married a titled foreigner, or ordinary citizen of another country, only later to find that her marriage was not recognized in her husband's country.

Each state has fixed an age for both the male and the female when marriage is considered legal, and, in most states, an age below which parental consent is necessary before a marriage can be legalized.

For purposes of reference the foregoing table is given (pp. 384, 385), which consists of a summary of the marriage laws in the various states. While these requirements of the various states for marriage are given, individuals contemplating marriage should first study the laws of the state of residence.

License to Marry.—Young people should understand just what the law requires before marrriage can be consummated. Every state now requires a license to marry. In cities a special license clerk may be delegated to issue the license, but the license is usually issued at the county seat by a county official, usually the clerk of courts. No girl should consent to a marriage ceremony without first satisfying herself of the legality of the license, which she or her parents or guardian should examine carefully.

Officials Empowered to Perform the Marriage Ceremony.—A clergyman in good standing, representing any church, a justice of the peace, a civil magistrate, such as a judge, are legally entitled to perform the marriage ceremony. Other officials in some jurisdictions have been so empowered, therefore, every one entering the marriage relation should be certain that the one chosen for this purpose is legally qualified to act. The state does not recognize the act of any church in the performance of the marriage ceremony unless such ceremony has been authorized by statute.

Witness to Marriage.—Witnesses to a marriage ceremony are a valuable precaution and their signature should be attached to the certificate of the officiating clergyman or magistrate.

Other Disabilities.—As shown in the Summary of the Marriage Laws of the various states, there are certain disabilities that bar one from wedlock. In some states first cousins may not marry; in other states the black and white races may not inter-marry. Recently, some states have enacted legislation requiring the physical examination of the contracting parties and a certificate from a competent physician that they are free from certain diseases.

Common Law Marriages.—The interchange of consent and the subsequent living together as man and wife have been called a "common law marriage," but American society properly looks with repugnance upon such unions and they have been made illegal in several states, as in Illinois. Similarly in New York, a marriage by a written contract, which must be signed in the presence of witnesses, and filed with the proper public official, has been substituted for the common law marriage, and is available if, for some reason, persons do not wish the usual marriage ceremony.

States that still recognize common law marriages extend certain forms of protection to the woman entering into such relationship, as well as to children born of such marriages. Just what rights a common law wife might have in the estate of her husband would have to be determined by the courts, and the legality of her children would probably have to be established in the same manner.

Divorce.—Although a detailed study of divorce is out of place in a work of this character, every woman should be familiar with the rights the law gives her as a wife.

Divorce changes the legal status of both husband and wife, which also means that the property rights of each undergo a change.

CAUSES FOR DIVORCE[1]

Summary of the Laws in Effect in the Various States

State or Territory	Residence required	Consanguinity	Cruelty	Desertion	Drunkenness	Fraud or force	Imprisonment	Incapacity	Insanity	Neglect	Want of age	Adultery
Alabama	1 to 3 years	.....	Yes..	2 years	Habitual	.....	2 years	Yes..	.....	.....	.....	.....
Alaska	2 years	Void.	Yes..	2 years	1 year...	Yes..	Felony	Yes..	No...	No...	Yes..	Yes
Arizona	1 year.	Void.	Yes..	1 year.	Yes.....	Void.	Felony	Yes..	No...	1 year	Void.	Yes
Arkansas	1 year.	No...	Yes..	1 year.	1 year...	Yes..	Yes...	Yes..	No...	No...	Yes..	Yes
California	1 year.	Void.	Yes..	1 year.	1 year...	Yes.	Felony	Yes..	Yes..	No...	Yes..	Yes
Colorado	1 year.	Void.	Yes..	1 year.	1 year...	Void.	Felony	Yes..	Yes..	Yes..	Void.	Yes
Connecticut	3 years	Void.	Yes..	3 years	Yes.....	Yes..	Yes...	No..	Yes..	Yes..	No...	Yes
Delaware	2 years	.....	Yes..	2 years	2 years..	Void.	2 years	Void.	Void.	No...	Yes..	Yes
District of Columbia	3 years	.....	.....	.....	.....	Yes..	.....	Yes..	Yes..	.....	Yes..	.....
Florida	2 years	Yes..	Yes..	1 year.	Habitual	.....	.....	Yes..	.....	.....	.....	.....
Georgia	1 year.	Yes..	Yes..	3 years	Yes.....	Yes..	Yes...	Yes..	Yes..	Yes..	.....	Yes
Hawaii	2 years	Void.	Yes..	1 year.	Yes.....	.....	7 years	Void.	Void.	Yes..	Void.	Yes
Idaho	6 mos..	.....	Yes..	1 year.	1 year...	Yes..	Felony	.....	Yes..	Yes..	Yes..	Yes
Illinois	1 year.	.....	Yes..	2 years	2 years..	Yes..	Felony	Yes.	.....	.....	.....	.....
Indiana	2 years	Void.	Yes..	2 years	Yes.....	No...	Felony	Yes..	No...	2years	Void.	Yes
Iowa	.....	Void.	Yes..	2 years	Yes.....	Yes..	Felony	Void.	Void.	Yes..	Void.	Yes
Kansas	1 year.	No...	Yes..	1 year.	Yes.....	Yes..	Felony	Yes..	No...	No...	Void.	Yes
Kentucky	1 year.	No...	Yes..	1 year.	1 year...	Yes..	Felony	Yes..	No...	Yes..	No...	Yes
Louisiana	.....	.....	Yes..	Yes..	Habitual	.....	Felony	.....	.....	Yes..	.....	.....
Maine	1 year.	Yes..	Yes..	3 years	Yes.....	No...	Yes...	Yes..	No...	Yes..	No...	Yes
Maryland	2 years	.....	.....	3 years	.....	.....	.....	.....	Yes..	.....	.....	.....
Massachusetts	3 to 5 years	.....	Yes..	3 years	Yes.....	.....	Felony	Yes..	.....	Yes..	.....	.....
Michigan	1 year.	Void.	Yes..	2 years	Yes.....	Void.	3 years	Yes..	Yes..	Yes..	Yes..	Yes

Missouri	1 year.	Void.	Yes..	1 year.	1 year...	.....	Yes...	Yes..	No...	Yes..	No...	Yes
Montana	1 year.	.....	Yes..	1 year.	1 year...	Yes..	Yes...	Yes..	Yes..	Yes..	Yes..	Yes
Nebraska	1 year.	Yes..	Yes..	2 years	Yes.....	Void.	3 years	Yes..	.....	Yes..	Yes..	Yes
Nevada	6 mos..	Yes..	Yes..	1 year.	Yes.....	Yes..	Felony	Yes..	No...	Yes..	Yes..	Yes
New Hampshire	1 year.	Void.	Yes..	3 years	3 years..	Yes..	1 year.	Yes..	No...	Yes..	Yes..	Yes
New Jersey	1 year.	Void.	Yes..	Yes...	Yes.....	No...	Felony	Yes..	No...	Yes..	Void.	Yes
New Mexico	1 year.	.....	Yes..	Yes....	Habitual	.....	Felony	Yes..	.....	Yes..	.....	.....
New York *	Actual	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Yes
North Carolina	2 years	Void.	Yes..	10 years	No.....	No...	No....	Yes..	No..	Yes..	Void.	Yes
North Dakota	1 year.	.....	Yes..	1 year.	1 year...	Void.	Felony	Void.	No...	Yes..	Void.	Yes
Ohio	1 year.	.....	Yes..	3 years	3 years..	.....	Yes...	Yes..	No...	Yes..	Yes..	Yes
Oklahoma	1 year.	No...	Yes..	1 year.	Yes.....	Yes..	Felony	Yes..	No...	Yes..	No...	Yes
Oregon	.....	No...	Yes..	1 year.	1 year...	Yes..	Felony	Yes..	No...	No...	Void.	Yes
Pennsylvania	1 year.	Yes..	Yes..	2 years	No.....	Yes..	2 years	Yes..	Yes..	Yes..	No..	Yes
Rhode Island	2 years	Yes..	Yes..	5 years	Habitual	Yes..	Felony	Yes..	Yes..	Yes..	Void.	Yes
South Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Dakota	1 year.	No...	Yes..	1 year.	1 year...	Void.	Felony	Yes..	No...	No...	Void.	Yes
Tennessee	2 years	.....	Yes..	2 years	Habitual	.....	Felony	Yes..	.....	Yes..	.....	Yes
Texas	6 mos..	.....	Yes..	1 year.	Habitual	.....	Felony	Yes..	Yes..	Yes..	.....	.....
Utah	1 year.	No...	Yes..	1 year.	Yes.....	No...	Felony	Yes..	Yes..	Yes..	No...	Yes
Vermont	2 years	Yes..	Yes..	3 years	No.....	.....	3 years	Yes..	Yes..	Yes..	Yes..	Yes
Virginia	1 year.	No...	Yes..	3 years	No.....	.....	Felony	Yes..	Yes..	No...	Yes..	Yes
Washington	1 year.	.....	Yes..	1 year.	Habitual	.....	Felony	Yes..	Yes..	.....	.....	.....
West Virginia	1 year.	Yes..	Yes..	3 years	Yes.....	Yes..	Felony	No...	No...	Yes..	Yes..	Yes
Wisconsin	2 years	No...	Yes..	1 year.	1 year...	No...	3 years	Void.	No...	Yes..	No...	Yes
Wyoming	1 year.	Void.	Yes..	1 year.	Habitual	Void.	Felony	Yes..	Void.	Yes..	Void.	.....

* Marriages may be annulled for causes making them void from the beginning.

NOTE.—The above table presents only the principal causes for divorce in the various states. The words "Yes" and "No" are not always to be taken without qualification, but as being applicable under certain conditions. The word "void" may indicate that a marriage may be absolutely void for the cause named, that it may be voidable or that it may be annulled by court proceedings. Bigamy, it may be added, is a cause for divorce or annulment of marriage in practically all of the states.

[1] From the *Chicago Daily News Almanac*, by courtesy of the *Chicago Daily News*.

An annulment of a marriage is not divorce, but the pronouncement of a court as to the illegality of the marriage. Divorce is issued for cause recognized by the statute.

A summary of the causes for divorce recognized by the various states is given on pages 388 and 389 for reference purposes:

Alimony.—Alimony is money paid by the divorced husband for the support of the wife under order of the court. If the wife is proved to be the offending party in an action for divorce, courts do not usually allow her alimony. In only one state has alimony ever been awarded to a husband. During divorce proceedings the husband must support his wife and pay her attorney's fees, as well as his own, in addition to any alimony the court may award the wife, and this, regardless of which party brings the action, and in some states regardless of the wife's guilt.

The Rights and Liabilities of the Husband.—Although each state makes its own laws governing the relationship and property rights of husband and wife, there are certain fundamental principles at common law upon which the courts have established certain practices.

Each state establishes the legal status of husband and wife, and, as a result, the laws of the various states pertaining to property rights of husband and wife are confusing. The facts set forth in this chapter show the general tendency of all such legislation, although there may be exceptions that obtain in some states.

In this country the personal rights of the husband over the wife are very limited. The husband is the legal head of the family and it is his duty to support the family, although in a few states joint-responsibility is placed upon husband and wife. The husband has no rights of chastisement so far as the wife is concerned. The wife's domicile follows that of her husband.

In case of personal injury to the wife by another, a husband may sue for loss of her services, which would probably be interpreted by the courts to also mean her companionship, and all that that implies.

A husband is liable for the necessities of the wife but the construction of the word "necessities" is left to the interpretation of the courts. In numerous cases women of extravagant tastes and tendencies indulged in numerous luxuries by well-to-do husbands have been awarded by the courts support commensurate with the style and manner in which their husbands had previously main-

tained them. The court, in fixing alimony or maintenance, takes into question the financial standing and ability of the husband and the need of the wife.

Failure to contribute to a wife's support on the part of a husband who has left his wife without divorce is considered desertion, and the husband is liable to arrest and punishment, according to the laws of the state in which the wrong is committed. In some states desertion is a crime and subject to extradition, while in other states, the husband's property may be attached and sold to satisfy the claims of the wife.

In interpretation of the acts of the wife, the law takes into consideration the principle of *agency;* if the act of the wife is that of an agent for the husband, the responsibility rests upon the husband.

The Rights and Liabilities of the Wife.—Legally, husband and wife are not one but separate entities. If the wife possesses property at the time of marriage it remains hers. The wife may acquire and hold property, both real and personal, and it is not subject to the husband's control or liable for his debts. A married woman, so far as property is concerned, has all the rights of an unmarried woman. She may carry on business, make contracts, sue and be sued and judgments may be entered against her as if she were single.

In personal injury cases, action may also be brought in her favor for injury to her person, and the award becomes her sole property.

Although a husband is considered liable for his wife's debts, such is not the case with the wife. She is not responsible for his debts, and his life insurance cannot be held for them after his death. All life insurance payable to the wife becomes hers at the death of the husband and it cannot be alienated on any claim against the husband's estate.

Again, although a husband is liable for the support of his wife and children, a wife is under no legal obligation to contribute to her husband's support, regardless of the financial responsibility of either party.

In some states a wife may enter into partnership with her husband and share in the profits of the business and yet not be liable to the creditors of the concern.

If a husband and wife no longer live together, that fact does

not change the wife's claim upon the husband for support, so long as the marriage tie has not been broken legally. Although the wife may not be entitled legally to the support of the husband if she deserts him without cause, the interpretations of the courts generally hold the husband responsible for the wife's necessities.

Function of the Law Regarding the Family.—The permanency of the home depends upon the marriage relation and the future of the nation is dependent upon the maintenance of the home. The law has rightfully tried to safeguard the institution of marriage, and a study of the law pertaining to all that concerns the home should be the duty of every girl and woman. Every woman should be thoroughly familiar with the rights the law gives her, if for no other reason than that her ignorance may not be taken advantage of, consciously or otherwise.

QUESTIONS

1. Define the word "suffrage."
2. Where are the laws made governing marriage, divorce and the inheritance of property?
3. What is the difference between the functions of Congress and those of the State Legislatures?
4. Have the courts any direct law-making powers?
5. In what way do the courts exercise indirectly powers conferred only upon the State Legislatures and upon Congress?
6. What is meant by "legal age"?
7. What is the legal meaning of the term "infant"?
8. Define the terms, "bigamy"; "polygamy"; "monogamy."
9. What is meant by "alimony"?
10. Write out briefly the more important legal rights and liabilities of the husband, and also of the wife.

PROBLEMS AND DEMONSTRATIONS

1. What is the age of majority in your state?
2. Who in your state is empowered to perform the marriage ceremony?
3. Who has authority to issue a marriage license in your county?
4. Is a witness to marriage necessary in your state? and how many?
5. Can women vote in your state? If so, for what offices?
6. May first cousins marry in your state?

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CHAPTER XXXI

REAL ESTATE TITLES AND TRANSACTIONS

THE law governing the transfer and inheritance of real estate varies in different states, as has been already stated. It is not necessary for the average owner of real estate to be familiar with all of these laws, but there are certain fundamental facts that everyone should know. Such knowledge will be the best safeguard against unwise action with regard to property, for it will impress one with the need of expert advice from the lawyer and real estate dealer, since the issues involved are of vital financial importance to the family.

Title to Real Estate.—In this country lands held by the early grants from foreign rulers became the property of the original states or colonies. When the Federal government was formed much of the land was transferred by the original states to the government. Out of this excess land, and other land secured by the general government by purchase and treaty, other states have been carved, the government retaining certain lands in different states as its own property.

Private ownership in this country has been derived either from the states or direct from the Federal government. Individual ownership means the free right to mortgage, sell and dispose of by inheritance or other means. Numerous transactions covering a single piece of real estate would soon complicate the title, and in order that an owner might prove his title, the various states have decreed that all real estate titles be recorded at the county seat of the county in which the property is located. The official having charge of such records is usually known as the Register of Deeds.

The deed, mortgage or release or any document affecting the title of real estate should be recorded by the Recorder or Register as a part of the county's permanent records.

In the course of years, land that has been subjected to numerous transfers, incumbrances and tax levies, will present a complicated record on the books of the Register of Deeds. To tell whether or not an owner has a good title, in time, becomes a question that can be correctly answered only by a competent lawyer, or one well versed in real estate law and practice.

Abstracts of Title.—An abstract of title is a written document showing all of the transactions covering a piece of real estate that are on record in the office of the Register or Recorder of Deeds, from the time the property was granted by the Federal or state government down to the present time.

Abstract companies are usually licensed and bonded by the state in which they operate. They certify that the abstracts they have issued are true and faithful copies of all records covering the land in question, appearing on the books of the Register of Deeds, the Treasurer of the county and other county officials.

This certification does not by any means indicate that the abstract company guarantees the title as either clear or sound. The abstract should be submitted to a competent attorney to pass upon the validity of the title.

Guarantee Policies.—There are abstract and title trust companies that issue what is known as a Title Guarantee Policy, or an abstract of title together with a guarantee that the title is valid and free from all incumbrances. If a flaw should be discovered in the title of property covered by such a guarantee, the company issuing the guarantee would be liable for any damage sustained thereby by the holder of the policy, up to an amount contracted for in the title guarantee policy. Such a policy is really a kind of title insurance.

The Torrens System.—In 1857, Sir Robert Richard Torrens, then premier of South Australia, devised a system of registration of titles to land which, if generally adopted, would do away with the cumbersome and complex system now in use. It would take the place of the abstract systems now in vogue.

Under this system, a title is examined and certified to by an official examiner, representing the state-at-large. An application is made to the proper court, and the official examiner's certification is attached to the application, which also names all parties in any way having an interest in the property in question. This takes the form of a complaint, the state acting as the defendant. A summons is issued to every claimant, and if the interested parties cannot be found, it may be published. If a contest developes, a hearing is granted and the court enters a decree either directing or refusing registration of title, subject, of course, to any incumbrances existing against the property in question.

A small tax upon the land registered goes to form an indemnity

ıd, against which any person damaged by the registration may ng an action within a limited time. Once title is registered it ınot be annulled. Any further transfer of the property merely olves the surrender of the first certificate and the issuing of a v one. The cost of securing such a registration is low, but ies in different jurisdictions.

There are many who strongly advocate this system. In new ıntries, in which transfers of real estate have been few, it would comparatively easy to inaugurate this system, but in older settle- nts its adoption is slow. Illinois in 1897 was the first state this country to adopt the Torrens System. Other states have opted modifications of the system, among them Oregon, Cali- nia, Minnesota, Massachusetts, Colorado, Washington and New rk, but it is not compulsory in these states. In Illinois it is npulsory in estates of decedents, and in the Philippines in the case public lands, and in Hawaii as to lands owned by corporations.

Rights of Husband and Wife in Real Estate.—Every state s its own law establishing the rights of husband and wife to real ate, and every married person should be familiar with the prop- y rights given them by the state.

Some states require both the signature of the husband and the fe in the transfer of any realty, and it is the practice in all tes to demand the signature of both parties irrespective of the v.

The law of inheritance also should be looked up by every in- ridual who is apt to be the recipient of property through in- ritance. State law fixes the apportionment of property between fe and children, or father and children in case of the death of her mother or father.

Real estate in which a minor owns a part interest cannot be sposed of until the minor attains legal age, unless by an order court.

Joint-Tenancy-Deed.—Some states permit the husband and fe to hold a piece of real estate in joint-tenancy. In such a se, if either party dies, the property belongs to the other party ithout probate or court proceedings, and it is not subject to vision among other heirs of the deceased.

Purchase of Property.—Before purchasing property one should st be satisfied that the title is perfect in every respect; but there e other important factors to consider. In the first place, do not

trust to your own judgment or experience unless you are a real estate broker or lawyer. Employ experienced and expert help to pass upon all legal matters and questions of title. A few of the other factors mentioned are the following:

Assessments and Taxes.—The seller of real estate is expected to pay all taxes due at the date of the sale, as they are an incumbrance on the property.

In many cities, a lot is not only liable for street improvements in front of the property, but for the immediate vicinity. When purchasing real estate, one should see that the abutting and nearest streets are paved, that sidewalks are installed and that sewers have been completed. Assessments covering street improvements are usually levied so as to cover a long term of years. One should be sure that all such assessments have been paid in full, not merely to date, but covering the entire levy. Be sure and ascertain the area of assessment so that one may know exactly what are the liabilities attaching to the property in question. If street improvements have been made by private concerns one should find out if they have been accepted by the municipality.

Colleges, universities, cemeteries and church properties are generally exempt from taxation. This means that the area of taxable property is limited by the extent of such holdings. This being the case, the remaining property must bear the tax for the entire district.

Legal Status of the Street.—A prospective purchaser of real estate should establish for himself the legal status of the street upon which his property abuts. There are such things as private streets which may never be opened by the authorities as public streets and which may even be closed, in which case the owner abutting thereon could not recover damages.

It is just as important to ascertain the legal status of alleyways and who is responsible for their condition. In some places, no provisions are made for alleys. Every lot should be provided with an alley, where there is an alley system, and with free access to the public highways.

Public Grade.—The public grade of a street also should be investigated with reference to abutting property. One should see if any changes in grade are pending. Property on grade when purchased might be required to make expensive fills, or remove many cubic feet of dirt and rock, if the municipality should change the

grade of the street. Any such intention on the part of a corporation should be disclosed before the purchase of property, if such intention exists.

Other Factors to Consider.—Aside from legal and financial factors, one should endeavor to forecast the development of the neighborhood during the coming years. Are street car lines liable to be projected on the abutting street or within the neighborhood? Street car lines on residence streets are undesirable. Are there saloons in the neighborhood? Factories, shops or stores? Is the neighborhood apt to deteriorate or will it hold its own for a number of years as a residence district? Will the property be likely to increase in value? These are questions that should be asked and seriously studied by every prospective purchaser.

Through streets are generally considered more valuable than side streets, short thoroughfares and courts. One cannot be too careful in considering every feature of a real estate problem. In such cases, prevention is more than usually the best cure for real estate ills. Be sure you are right before you go ahead and do not attempt to deal with expert problems without the aid of an expert.

Mortgages, First and Second.—Mortgages have been discussed under Investments (p. 344). A second mortgage is one given after and subject to a prior or first mortgage. If a second mortgage were foreclosed, the owner of the second mortgage would have to pay the first mortgage before he could become the owner of the property foreclosed.

If a piece of real estate were incumbered by both a first and a second mortgage, and the first mortgage became due and the holder of the same wished to renew the first mortgage for another term of years, he could not release the original mortgage without endangering his interests. As soon as a first mortgage is released, an existing second mortgage on record takes its place and becomes a first mortgage or lien. Arrangements would first have to be made to release the second mortgage before the first mortgage could be released.

If a piece of property were incumbered by both a first and a second mortgage, and the first mortgage were foreclosed, the act of foreclosure would obliterate the second mortgage, and the holder of the second mortgage would have no further claim against the property sold to satisfy the first mortgage.

Foreclosure.—Foreclosure means the public selling of mort-

gaged property to satisfy a debt secured by a mortgage against the property. State laws regulate the procedure of foreclosure, which involves a judgment by a court. The proposed foreclosure is usually advertised through the medium of a newspaper published in the county in which the property is located, and such advertisement must be continued for a definite time fixed by law, which is considered as a notice served upon the owner of the property or by other methods provided by law. The description of the property, the name of the owner, the amount of the debt and the name of the holder of the mortgage, together with the amount of accrued interest and unpaid taxes are usually made a part of such notices. A date is fixed for the sale, and on that date the sheriff of the county usually offers the property at public sale, and knocks it down to the highest bidder. The record of the sale is filed, and then the owner of the property is given a definite time in which he may redeem the property by paying the amount the property was sold for, plus the cost of the sale, and any taxes paid since the date of the sale by the one who bid the property in.

Release of Mortgage.—If a real estate mortgage has been paid the owner of the mortgage must execute a release of mortgage, and this release must be filed in the office of the Register or Recorder of Deeds in order to clear the records and title.

Recording Fees.—The law fixes a price that the register of deeds may charge for recording each instrument such as a deed, a mortgage or release. Custom dictates as to who should pay filing fees, whether buyer or seller.

Methods of Conveyance.—In disposing of real estate there are two forms of deeds that may be issued, the *warranty deed* and the *quit-claim deed.*

THE WARRANTY DEED: This deed is what its name signifies, a warrant from the seller to the purchaser that the title being transferred is perfect and valid, and free from all claims. This is the form that every purchaser should insist upon securing from the seller. If a piece of real estate is cumbered by a mortgage of a thousand dollars, for instance, and the seller or grantor is selling the property subject to that mortgage, in which case the purchaser agrees to assume and pay the mortgage, a clause is usually inserted in a warranty deed, reading about as follows: "Subject to a mortgage of one thousand dollars, given to John Doe on the 26th day of December, 1916."

By the terms of the warrant the property is guaranteed free from incumbrances with the single exception stated.

QUIT-CLAIM DEED: A quit-claim deed is also what its name indicates, a release, or, in this country, a transfer of whatever interest the grantor may possess in the property, to the purchaser. The grantor guarantees nothing but the transfer of whatever interest he may have in the property. The title may be at fault; the property may be subject to mortgages, judgments and unpaid taxes, and under such a deed the purchaser could not recover for such liens from the grantor.

Many unsuspecting persons who have attempted to act upon their own judgment and thus dispense with the counsel of experts or lawyers have been subjected to loss by purchasing property on a quit-claim deed.

Parties to a Conveyance.—The seller is known as the *grantor;* the purchaser as the *grantee.* The conveyance of a homestead *should be signed by both husband and wife,* if both are living, even if the law of the state does not require it. A widow, a widower, a bachelor or a spinster in conveying real estate usually states the fact in the body of the conveyance, as "John Smith, a widower," or "Mary Smith, a spinster," or "John Jones, a bachelor." This is done to avoid question in regard to a possible interest in the property derived from the fact of relationship and inheritance.

Two witnesses are generally required to the signature attached to a real estate conveyance. The law in each state regulates this, as well as other factors involved. An affidavit is also required, by which the grantor or grantors swear before a notary public to their signature or signatures and to the effect that the transfer is "their voluntary act."

Recording Conveyances.—Before title is actually perfected, a deed must be recorded with the register of deeds at the county seat. It is not the deed or article of conveyance in itself that consummates the sale, but the recording of the conveyance. Swindlers have been known to have sold a piece of real estate to two different parties. The one depositing his deed with the register of deeds *first* would be the one recognized by law as the owner of the property, even though the deed given the other party bore an earlier date than the one deposited or recorded with the register of deeds, and the earlier purchaser could only secure his rights by a court action. A deed might be held by the grantee while the title on record would

still show the property to be in the name of the grantor. In this case, it would be possible for the grantor if dishonest to mortgage the property or otherwise dispose of it, as the title still stands in his name.

Of course, all such transactions are fraudulent, but it places the proof of fraud upon the grantee or purchaser, and this means delay, suits in court and much expense, with possible loss of the property.

Liens.—An incumbrance on real estate is a lien. A real estate mortgage, taxes and assessments due and court judgments for debts are all liens, but the term is more specifically applied to claims filed against property, either real or personal, for work performed, generally in the erection of a building. In such cases it is known as a "mechanic's lien."

As in the case of other liens, a mechanic's lien in order to be effective and legal must first be filed in the office of some county official designated by the state. In some states this official is the register of deeds; in others, the county or the town clerk, or the clerk of the district or other court.

In purchasing property, especially newly erected buildings, it is necessary to ascertain if all contractors and workmen engaged in erecting the structure have been paid in full for their work. As the law in different states gives the contractor and sub-contractor different periods of time in which to file a lien against property, it is not always possible to tell from the public records whether or not a lien is pending.

One should find out what this period of time is for the state in which the property is located. If the building has been completed and the term fixed by law for the filing of a lien has expired, and there is no record with the proper county official of a lien, the purchaser is safe; otherwise he should demand of the seller receipts in full from all contractors and workmen for work done on the structure.

In some states only the principal contractor may file a lien; in some both the principal and the sub-contractor; in others, in addition to the foregoing, laborers and those who have supplied materials, also farm laborers.

The period in which liens must be filed varies in different states from thirty to one hundred and twenty days after completion of the work. After a lien is filed suit for the recovery of the amount of

the lien must be started. The law also fixes the time after the filing of the lien in which suit must be brought, if at all. If suit is not filed within this period the lien no longer exists. This period for bringing suit varies from twenty days to six years.

PERIOD WITHIN WHICH MECHANIC'S LIEN MUST BE FILED OR SUIT STARTED

Time	State
20 days	Rhode Island
3 months	California, Idaho, Maine, Massachusetts, Missouri, New Hampshire, Vermont
6 months	Alabama, Arizona, Colorado, Mississippi, Nevada, North Carolina, Oregon, South Carolina, Virginia, West Virginia, Wyoming
8 months	Washington
15 months	Arkansas
1 year	District of Columbia, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Montana, New Jersey, New Mexico, New York, Tennessee, Utah, Wisconsin
2 years	Connecticut, Nebraska
5 years	Maryland, Pennsylvania
6 years	Ohio

Judgments.—A judgment is a conclusion of a court as a result of a suit, which judgment becomes a lien against real estate owned by the person against whom judgment has been taken. If a mechanic's lien is filed with the legally constituted authorities it then becomes a lien against the property. Suits for any debts held by a mechanic or contractor or any one else may be brought and they may become judgments.

If real estate against which a judgment is filed should be sold part of the proceeds of the sale would be taken by the court to satisfy or pay the judgment. Lenders would not accept a mortgage against a piece of property upon which there was a judgment filed. The judgment would have to paid first.

Before purchasing property one should have the records searched for judgments, which should be paid and satisfied by the owner before the sale is consummated. For judgment notes, see page 344.

QUESTIONS

1. What is a lien? a judgment?
2. What is the difference between a Warranty and a Quit-Claim Deed?
3. What is an abstract of title? a Guarantee Policy?

4. Explain the purpose of the Torrens System.
5. If a mortgage has been paid, what step is necessary to clear the title?
6. What is a second mortgage?
7. If you held a first mortgage against a piece of property for $1,000 and the owner subsequently placed a second mortgage upon the property for $500.00 and the latter come due, would your interests be imperiled?
8. If the case were reversed and you held the second mortgage and the first mortgage became due, would your interests be imperiled?
9. What is a Joint-Tenancy Deed?
10. Does your state provide for joint-tenancy?
11. What factors should be considered before real estate is purchased?
12. What is meant by the terms "grantor" and "grantee"?
13. What is a "mechanic's lien"? A judgment?

PROBLEMS AND DEMONSTRATIONS

1. Procure a copy of a Warranty and a Quit-Claim Deed, and fill it out to John Doe.
2. Can the homestead be disposed of without the signature of both husband and wife?
3. When are taxes due in your city, town or county? Where would you pay your taxes?
4. Who is the Recorder of Deeds in your county, and where is his office located?
5. If possible, some member of the class should borrow an abstract of title and bring it to school for the inspection of the students and for an explanation of the same; or better, perhaps, a representative of a local abstract company, or of a real estate firm, may be willing to appear before the class and explain such a document.
6. Is it necessary for both husband and wife to affix their signatures to a real estate deed in your state? To a real estate mortgage?

REFERENCES

HARDY AND FIELD, INSURANCE: REAL ESTATE. Alexander Hamilton Institute, New York City.

PRACTICAL REAL ESTATE METHODS FOR BROKER, OPERATOR, AND OWNER, West Side Y. M. C. A., New York City.

CHAPTER XXXII

INHERITANCES AND WILLS

THERE are few legal subjects as important to the average individual as the law that governs property rights. If a woman marries possessing property of her own, her marriage in various ways affects the status of her property, and if her husband possesses or subsequently acquires property, she acquires therein new property interests. The death of either husband or wife also changes property relations. The interests of children in the estates of their parents are vitally important matters with which everyone should be familiar.

Two Forms of Property.—In the study of taxes it was shown that there are two general classes of property: *real estate,* which includes lands and buildings, and *personal property,* which includes movable property.

Estates.—Concerning real property an estate consists of the right or ownership one possesses in land. Such estates are of two kinds: *Fee simple,* or one that the owner may dispose of during his life, or in the event of his death, which descends to his heirs if he dies *intestate,* or without a will. This form of estate is also known as *"estate of inheritance."*

The other form of estate is called an *"estate not of inheritance"* or a *"life estate"* under which one may hold the title to land during the time of one's life, or for a definite term of years, in which case it is spoken of as a *"leasehold estate."* Such estates end with the death of the holder, as they are not subject to inheritance as in the case of an *"estate of inheritance."*

Lineals.—This term is applied to the *direct* descendant of a person, such as children and grandchildren, or to father, mother and grandparents, if there are no descendants.

Collaterals.—This term is applied to persons not in a direct line of descent, as are *lineals.* They consist of brothers and sisters, nephews and nieces, half-brothers and sisters and their children.

Intestate.—One who dies without a will is said to have died *intestate.* In such an event the property of the deceased would descend to surviving lineals, or if there were none such to surviving *collaterals.*

Escheat.—If a person of property dies without a will, if no surviving heirs can be found, the property reverts to the State. If a Public Administrator does not exist, the Probate Court or a court acting in that capacity in such a case, appoints an administrator for the estate. It is his duty to make an inventory of the estate, pay the just obligations of the deceased out of the estate, and advertise for legal heirs of the deceased. If the latter cannot be found, the property of the deceased escheats to the state.

Administrator.—This term is applied to the person appointed by the proper court to administer, or settle, the estate of one who dies without a will or "intestate." In case a deceased leaves a will and appoints an executor who fails to act the court appoints an administrator with the will annexed. The feminine form is *administratrix.*

Executor.—This term is applied to the one appointed by a will to administer or settle an estate in case of the death of the testator. The feminine form is *executrix.*

Testator.—This term is applied to a man who makes a will. The feminine form is *testatrix.* Testate means having died leaving a valid will; it is the opposite of intestate.

Dower.—Dower is a life estate of either wife or husband in the real estate of the other, after that other has died intestate. It consists of one-third of the rents and profits of said real estate for the lifetime of the survivor.

Will.—A will is the formal disposition of one's property, made as prescribed by law, and taking effect at the death of the testator or testatrix.

Non-cupative Wills.—This term is applied to an oral will. The laws of the various states differ in regard to oral wills, but they obtain only in relation to personal property, or if by reason or extremity one is unable to make a written will. They must, however, be reduced to writing within a definite time fixed by law, after the death of the testator. The tendency of the courts is to admit Non-cupative Wills to probate when supported by incontrovertible testimony of proper witnesses.

Codicil.—A formal and written document intended as an amendment to a will made during the lifetime of and by the maker of the original will. By such a document the maker of a will may later change the terms of the same, revoke them or add to them, but it must be executed with the same formalities as the original will.

Probate.—At death, a person's will is presented for probate; that is, the proper court passes upon the legality of the will. If a bond is required by the executor it must be approved by this court. If no executor has been appointed, or if he refuses or fails to act, this authority appoints an administrator with the will annexed. The probating court has authority to investigate and pass upon the distribution of the estate made by the administrator or executor, and to declare the estate properly closed or administered.

In order to understand the distribution of property after the death of the owner, it is essential that one should become acquainted with the terms that have been defined.

It must be remembered that each state has sole jurisdiction over the distribution of the property of a decedent, within that state.

In *general,* the principle governing inheritances is similar in all states, although slightly varying. It should be remembered that the first principle to be considered in inheritances, where the deceased is married, is the right of *dower.* Whether an estate be testate or intestate, the rights of dower obtain unless the testator gives certain property to a surviving spouse in lieu of dower. The law of each state determines the dower rights of husband and wife, which rights may be enforced whether or not the decedent leaves a will. In case a will is left, either husband or wife, may elect to take the share of the property allowed them by law, as "dower" the same as though the decedent left no will, rather than to accept the provision made for the husband or the wife in the will by the decedent. On the other hand, dower rights may be waived, and the provisions of the will accepted instead.

Distribution of an Intestate's Property.—LINEALS.—

First: To intestate's children in equal parts.

Second: The descendants of a deceased child take the share of their deceased parents.

COLLATERALS.—Where there is no surviving spouse and no children nor descendants of children, inheritance runs as follows:

To parents, brothers and sisters and their descendants, allowing to a parent a brother or sister's share.

The statutes of the various states are different on this subject, each from the other. The student should be content with a study of fundamentals, so far as this subject is concerned, and look to the statutes of the state of residence for particular and more specific information, and should determine the exact line of descent that prevails under the law of the state in which one lives.

Joint-tenancy.—This has been discussed in another chapter (p. 395), but it is mentioned in this connection in relation to wills. If a piece of property is held in joint-tenancy by husband and wife, at the death of either party the property vests in the other party without probate or other legal proceedings. Property so held, cannot be diverted by either party by will. The husband, for instance, could not will it or any part of it, as his interest in the property ceases at his death.

Revocation of a Will by Law.—If a single woman makes a will and subsequently marries the will is automatically revoked or annulled. If a man makes a will and subsequently marries it is revoked to the extent of allowing the wife and the children, if any, the statutory rights given them by the state in case of intestacy.

The Making of a Will.—The laws of each state specifically say what constitutes a legal or valid will, but there are general principles that are common to all states.

Anyone of legal age and of sound mind may make a will. It is not absolutely necessary to have a lawyer draw up a will, but if there is any considerable amount of property to be disposed of, or if complex situations or relationships are involved, one should not attempt to draw up and execute one's own will without the advice and assistance of a competent attorney.

The language of a will should be as simple and as direct as possible, and great care should be exercised to choose words and phrases, and to punctuate in such a way that no more than one meaning may be attached to a word, phrase or sentence.

There are certain words and phrases often used in wills, such as an opening declaration that the testator is "of sound mind" that are not legally necessary, but there are other words and phrases that should be used for the sake of certainty and to insure the carrying out of the testator's wishes. In order to bring out these necessary and desirable parts of a will, a sample will is given as follows, with the vital points italicized:

> I, John Doe, do make *this my last will* as follows:
> All my estate, both real and personal, I *devise* and *bequeath* to my wife, Elizabeth Jane Doe, for her own benefit and use forever, and I hereby appoint her my sole executrix, *without bonds*, and *with full power to mortgage, lease, sell, or in any other manner to dispose of the whole or any part of my estate.*
> Dated January 20, 1917, JOHN DOE (*Seal*).
> at Chicago, Illinois.

Subscribed, sealed and published, and declared by John Doe, the testator named above, as and for his last will, in presence of each of us, who at his request, and in his presence, and in the presence of each other, at the same time, have hereto subscribed our names as witnesses this 20th day of January, 1917, at the city of Chicago, Illinois.

Mary Jones, 2126 Prairie Ave., Chicago, Illinois.
John Hart, 4126 Lincoln Ave., Chicago, Illinois.
James Montgomery, 1876 Calumet Ave., Chicago, Illinois.

Identity of the Will.—The statement over his signature, properly witnessed, that "I, John Doe, do make this my last will" is a written acknowledgment that the document is the testator's will.

With or Without Bonds.—In the illustration above, the wife has been appointed executrix *without* bonds, which does away with any necessity of calling upon friends or upon a surety company to furnish bonds, as a guarantee that as executrix she will faithfully carry out the devises and bequests of the will. If the words "with bonds" had been written in, the executrix of course would be compelled to furnish such security. If both phrases were left out, the executrix would be compelled to give bond.

Power to Dispose of Property Willed.—The phrase in the above will giving the executrix power to dispose of the property in any manner desired, means exactly what it says and frees the executrix from any claim that can take the property out of her hands.

Witnesses.—Most states require only two witnesses to a written will, but as a few states require three witnesses, it is better to have that number, and for the same reason the word "seal" should be used as some states require it and others do not.

The witnesses *must not* in any way *be interested in the terms of the will, or be mentioned as beneficiaries* in the will.

In the presence of the witnesses the testator, having signed the will, is supposed to state that "This is my will," following which the witnesses affix their signatures and addresses. Even though the witnesses should die before the testator the will would still be legal.

If possible, a will should be made and signed on one sheet of paper, but if this is not possible, the various sheets constituting the will should each be identified as a part of the will, but a will of such a length should only be entrusted to a lawyer to draw up.

Bank Deposits and Safety Deposit Boxes.—Unless a bank account is in the name of both husband and wife and subject to the

check of either party, in case of the death of one or the other there may be some question as to whether the money on deposit can be withdrawn by the surviving party without legal proceedings. For this reason, as stated in previous chapters, the family bank account should be of a joint nature and in the name of both parties, subject to the check of either party without the signature of the other party.

The same principle holds in relation to the rental of a safety deposit box. If not in the name of both husband and wife, at the death of the party in whose name the box was rented, certain difficulties might arise that would delay the surviving party in gaining access to the same. In order to avoid any possibility of such a state of affairs safety-deposit boxes should be rented in the name of both husband and wife, subject to the entry of either party at any time.

Minor Heirs.—Realty left by will or law to minors may not be disposed of by guardians or executors or administrators, unless empowered to do so by an order of court. This would also be true of property left jointly to two or more individuals, one of whom might be of age and the other a minor. Unless the court empowers the sale, the property must be held in trust until the youngest minor interested in it becomes of legal age. The property may be rented or leased or operated, the expense of operating and administrating coming out of the proceeds. Part of these proceeds, not to exceed his share, may be used for the education and support of the minor heir. All such expenditures would be deducted from the total proceeds at the final distribution after the minor had attained his majority.

Trust Companies as Executors and Guardians.—Trust companies are empowered to act as executors and administrators and guardians and in the absence of near and trusted relatives, it is wise to appoint such a company as the executor of an estate.

QUESTIONS

1. If your father and mother are living and they possess real estate, as well as personal property, and if the father should die without a will, what would be your share of the estate?
2. What would be your mother's share?
3. If you possessed property, were of age and had no heirs, how would your property be disposed of at death, if you left no will?
4. What official in your county has charge of estates?
5. If you possessed real estate, and later married, would your husband have any rights to that property?
6. If you married, what rights would the law of your state give you in the property of your husband?

7. What are the essential and necessary principles or features that must be embodied in a valid will?
8. If a person died leaving a will what legal steps must be taken by the surviving heirs?
9. Suppose a parent died, leaving a will by which three children are given an equal and undivided interest in a piece of real estate. If two of the children are of age and the third one a minor, what disposition may be made of the property?
10. What is the relation of a Trust Company to estates?
11. Describe the meaning of "joint-tenancy."
12. What is meant by "dower rights"?
13. What one word is to be used in a will that includes real-estate? Personal property?

PROBLEMS AND DEMONSTRATIONS

1. Make a list of your living relatives, classifying them in relation to your father, if not living to your mother, as follows: First, lineal descendants; second: collateral heirs.
2. Who is the Probate Judge in your county, or the Public Administrator if there is one?
3. At the first opportunity, clip from a local paper a notice of the proposed settlement of an estate by an administrator?
4. What do "dower rights" consist of in your state?
5. Using fictitious names, make out a legal will disposing of a house and lot supposed to be located in your community, the household furniture of the home, money in the bank, and personal property.
6. Having made out such a will, underscore the principal parts of the will that must be part of the document in order to make it legal.
7. Is there a Trust Company in your community? If so, name it.

REFERENCE

SCHOULER, JAMES, LAW OF WILLS AND ADMINISTRATION. Boston Book Co.

CHAPTER XXXIII

LAWS WHICH AFFECT THE FAMILY

In addition to the laws governing the legal status of the family, real estate and its transfer, and those pertaining to inheritance and wills, which have been treated in the three preceding chapters, there are various general laws in all states that bear directly upon the interests of the home. A few of the more important principles recognized by the laws of most states, that affect family life, will be briefly reviewed in this chapter.

Written vs. Oral Contracts.—All contracts, for the sake of certainty, should be written, but certain contracts *must* be written to be legal. The latter are generally contracts pertaining to the sale or leasing of real estate, but in some states contracts for the sale of merchandise for a consideration over a specified sum must be written and signed by both parties thereto. An oral contract with the exceptions noted is legal. The difficulty of producing competent and reliable witnesses to prove oral contracts might urge everyone to have his contracts in convenient form for proof.

Illegal Contracts.—Contracts and agreements that are opposed to the general welfare of the community are considered to be against public policy and are illegal, void and cannot be enforced.

Incompetent Parties to a Contract.—Legal contracts may not be made with persons of unsound mind, with drunkards, infants or minors, or alien enemies. Contracts with married women may be subject to certain restrictions in certain states.

The Signature o Disabled or Illiterate Persons.—If one, for any reason, is unable to sign his name, he may make his "mark" in place of his signature, which must be witnessed, in which event it will legally stand for or take the place of his signature. Such a "mark" should be made and witnessed as follows: the illiterate or disabled one making the sign of a cross, and the witness writing his name:

Witness to mark:
Henry Jones,
10 W. 7th St.,
Chicago, Ill.

John
His × Mark
Doe

The address is simply for identification.

Usury.—Each state fixes a legal rate of interest which may be charged on indebtedness. In many states this rate is 6 per cent. An open account may be due, and in suing to recover the amount of the same, the creditor may ask that interest be paid on the debt. If interest was allowed, not being agreed upon between debtor and creditor, in the first place, it would be fixed at the legal rate. Most states also allow a greater rate of interest if mutually agreed upon by contracting parties in writing. In some states this contract rate is 12 per cent. per annum. Interest charged in excess of the legal rate is called "usury." A penalty usually attaches against one who charges usurious rates of interest; if usury is proved, all that can be collected is the principal of the debt; all interest being forfeited as a penalty.

Gambling.—Contracts based upon gambling, chance or hazard, are void in most states. This includes stock-market gambling, betting and games of chance. In such states, one cannot be sued for a gambling debt or made to pay it. If money is still in the hands of a stake-holder to a gambling contract, it may be recovered. The Federal government has declared lotteries inimical to public welfare and the Post Office Department will not allow anything pertaining to lotteries to pass through the mails.

Contracts Made on Sunday.—Secular contracts are illegal in most states if made on Sunday, but a contract so made and intended to benefit charitable or religious objects or to preserve health, life or property, can be enforced. However, a contract made and executed on Sunday would probably not be interfered with by the courts.

Saloons and Drunkards.—In states where the sale of liquor is permitted, laws may prohibit saloons within certain districts or within definite distances of schools and churches. Some states also hold a saloonkeeper responsible under specific conditions for the consequences resulting from the sale of intoxicants to confirmed drunkards. A member of the family, or a friend of the family, may notify a saloonkeeper not to sell intoxicants to a man declared to be a drunkard. The saloonkeeper is required to post in a conspicuous place in his saloon the names of all such men. If he continues to sell intoxicants to them, any member of their families may bring suit to recover damages from that saloonkeeper.

Selling liquor to minors is, of course, an offense, and in many states it is against the law to sell or to give cigarettes to minors.

Caveat Emptor.—This is a Latin phrase meaning "Let the

buyer beware." In other words, the law presumes that the buyer will exercise ordinary judgment and intelligence in making a bargain and take due precaution against being cheated or defrauded. The buyer is under duty not to depend entirely upon the statements of the seller, but to protect himself by verifying, as nearly as possible, the facts set forth by the seller in the contract and all of the circumstances surrounding the transaction. If the buyer fails to do this and suffers damage, he must bear such loss.

Instalment Leases.—An instalment lease is a contract to sell an article which is to be paid for upon the instalment plan, which instalments are considered as rent for the use of the article. When a certain number of these instalments amounting to a definitely stated sum have been paid, the ownership in the article passes to the lessee, but until then title to the article remains in the lessor. (For Real Estate leases, see p. 126.)

Real Estate Mortgages.—These have been discussed on pp. 344 and 397.

Chattel Mortgages.—A chattel mortgage is one given upon chattels, or personal property, to secure the payment of a chattel mortgage note as this evidence of indebtedness is sometimes called. A chattel mortgage must be recorded with the proper official in accordance with the statute of the state. Foreclosure can be effected by complying with the terms of the mortgage if they are in harmony with the statute.

A chattel mortgage is foreclosed in the same way as a real estate mortgage (p. 397); if chattels are sold at foreclosure, the debtor has no further recourse and may not redeem the property.

Notes—Judgment Notes.—Promissory notes have been described on p. 342. A *judgment note* is a note in which the signer "confesses judgment." In case such note is not paid the holder is entitled to a judgment against the maker without notice, but such judgment must be entered by a court. For judgments, see p. 344.

Exemptions.—Each state allows its citizens certain property exemptions against judgments or claims for indebtedness. If a writ of execution was issued against one's personal property to satisfy a debt, the individual could claim the exemption of property of a value equal to the exemption allowed by law. A homestead, up to a certain valuation, is commonly exempted from judgment. This is done to prevent the debtor from becoming a public charge upon the community. A debtor may waive his rights of exemption.

Maturity.—The date an obligation is due is called the date of maturity. Instruments that fall due on Sunday or holidays, and in some states on Saturday, do not mature until the following business day. If the following Monday is a holiday and a note falls due the previous Sunday, its maturity would be the following Tuesday.

Days of Grace.—Three days after the maturity of a note is generally allowed for the payment of same, before legal action can be taken. If the law allows no "days of grace" payment is due at maturity.

Replevin.—This is an action brought to recover personal property wrongfully taken or held. A writ is issued by the proper court, the property is then returned to the claimant, pending a suit to determine the ownership of the same. If the judgment is adverse to the claimant the property is returned to the defendant.

Garnishment.—This is a term applied to the attachment of one's wages, salary, or credits. The exemption laws usually allow a debtor a minimum sum for the support of his family, which sum cannot be made subject to garnishment.

Statute of Limitations.—Each state fixes a limit of time, after which outstanding debts cannot be collected by legal process. For instance, an ordinary debt in some states under an oral contract cannot be collected by law after the expiration of five years from the time the debt became due. If the debt were evidenced by a book account, the period would be dated from the date of the last entry. If the debt was evidenced by a contract under seal, such as a real estate mortgage, the period of limitation would in some jurisdictions be twenty years from the maturity of the mortgage.

Barred Claims May be Revived.—If a claim has been outlawed, as it is called, by the statute of limitations, it may be renewed automatically by a new promise to pay by the debtor, given in the form of writing, or if the debtor unwittingly or otherwise makes a partial payment upon the principal or interest, the debt is renewed, and the statute of limitations will then run from the date of such promise or of such payment.

Property Restrictions.—Some cities and states have laws regulating the heights of buildings. Again, buildings of three stories or more may be required to be equipped with fire-escapes. In many places building-lines are established, and new structures may not be erected beyond such a line. As an illustration, the residence building-line may be twenty-five feet from the front of a lot. If a new structure were to be erected on an adjoining lot, only ten feet

from the front of the lot, it would interfere with the view and cut off light and air from the adjoining structure. To prevent this possible infringement of rights building-lines have been established in certain jurisdictions. A zone system has been advocated for cities by which definite zones or localities may be reserved for residence or for factory purposes.

The establishment of such a system would have to be brought about through legislative enactment. As conditions now exist in most cities there is nothing to prevent the gradual encroachment of factories and stores upon residential districts, which encroachment might greatly depreciate the value of property in such localities. Under the zone-system, factories, warehouses, storage plants and wholesale stores would be restricted within definite boundaries.

Some states permit two-thirds of the property owners in a city residence block by petition to the city council, to secure the establishment of a restricted residence block.

Public Bill-boards.—The Supreme Court has recently upheld a law providing that advertising bill-boards may not be posted in residence districts without the consent of the majority of property owners in the neighborhood. This decision will do much to stimulate an interest in the beautification of towns and residence districts, as unsightly bill-boards long have been a detriment to property values.

A Trust Deed vs. a Mortgage.—A Trust Deed is a real estate mortgage, but in place of the mortgage running to a Mortgagee, it is made out to a Trustee, who is generally a representative of the party loaning the money.

The Trust Deed conceals from the borrower the name and address of the lender, which makes it difficult for a prospective borrower to come in contact with private individuals who have money to loan and perhaps at a less rate of interest than would have to be paid through a broker, who also charges the borrower a commission for his services, usually two per cent. of the amount of the principal. Doubtless many lenders would be glad to invest their money in first-class mortgages at a fair rate of interest, without a commission, if they could come in contact with those who need to borrow.

For this purpose, if for no other, the form of the trust deed should be so amended as to make it compulsory to state in the body of the instrument the name and address of the real lender or purchaser of the same, and such information should be supplied to the

ower. Anything which serves to bring borrower and lender ther should be encouraged, and that which seems to cover up identity of the lender from the borrower and public should be lemned as inimical to public policy.

QUESTIONS

What is meant by gambling? Is playing cards for prizes in private homes gambling? Is a lottery of any kind gambling?
s a contract made on Sunday void in your state?
What is meant by the phrase "*caveat emptor*"?
What is usury?
What is meant by an "incompetent party"?
What is the difference between a real estate and a chattel mortgage.
What is meant by "foreclosure"?
Must mortgages be recorded?
When does personal property purchased on an instalment lease belong to the purchaser?
What is meant by the "maturity" of a note?
What is a "judgment"?
What is meant by "replevin"?
What is meant by "garnisheeing a claim"?
How may a barred claim be revived?
How may an illiterate or disabled person affix a legal signature?
What is a mortgage?
What is the difference between a mortgage and a trust deed?

PROBLEMS AND DEMONSTRATIONS

Does your state require saloon-keepers to post the name of drunkards in the saloon, and is the saloon-keeper required not to sell intoxicants to such persons?
What exemptions for debt are allowed in your state?
What is the statute of limitations for debt in your state?
Are the gambling laws in every particular enforced in your community?
Are the liquor laws enforced in your community?
What rate of interest is charged by the local banks on ordinary loans? On real estate loans?
What is the law in your state in relation to interest?
Secure a blank chattel mortgage form, read it carefully and explain its contents.
At the first opportunity, secure from a local paper, a copy of an advertisement of a foreclosure of a mortgage. Read it carefully and be prepared to explain its purpose and meaning.
Are days of grace allowed in your state?
Are there any property restrictions in your community? If so, what are they?
Where are judgments filed in your county?

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CHAPTER XXXIV

BUSINESS PRINCIPLES IN THE HOME—SUMMARY

As there are certain principles, generally accepted as fundamental by all business men in the commercial world, so every homemaker and housewife should adopt a household business code. Many items that should form a part of such a code have been mentioned in previous chapters, but are here repeated and others are given to furnish a summary of business principles for the home.

Fundamental Principles.—The maintenance and operation of a home is a business, and as such, it must be conducted efficiently and upon a business basis. Principles which one does not expect a business man to violate must not be violated in the running of the home.

"Time is money" is a well known business axiom. A housewife has no more right to squander her time than has a business man a right to waste it in his office. Clerks are not permitted to read the morning papers in the employer's time, and wives should not make a habit of delaying the work of the household for the sake of indulging in some form of recreation.

System is the business man's fetish. It should have the housewife's consideration. The business of the home should be systematized and simplified and placed upon the most efficient basis possible to obtain.

Marriage is a partnership on equal terms. The home is what all the members of the family make it; not what the mother makes it, but what the father and mother with the help of the son and the daughter make it. Each must do his or her share. The work of each, in proportion, is just as important as that of the other. If anyone neglects his or her share, it must be done by someone else. Lost and squandered time, waste of food or effort, breakage, mistakes, all mean loss in dollars and cents and in some way, at some time, someone must pay for such leakages. In other words, a successful home means successful coöperation on the part of each member of the family.

There are many specific principles that may be adopted by any housewife, and a few of them are given herewith:

Schedules for Work and for Employees.—It is easier to do one's own housework if a definite schedule of daily and weekly duties is made. It is much easier to have a perfect understanding with a maid when she is first engaged than it is to be continually issuing new instructions from day to day. There is certain definite work to be done in every household daily, or upon certain days of the week, and every mistress has her own preference as to when and how such work should be done. Much friction may be avoided by handing a new maid a carefully written (typewritten) set of instructions, preceded by a carefully worded explanation as to the purpose of submitting the mistress's wishes in this form. In the absence of the mistress there need be little cause of misunderstanding on the part of the maid in relation to her work or what is expected of her under certain circumstances.

The Housekeeper's Business Desk.—Every housekeeper should provide herself with a desk with compartments and plenty of drawers in it. This may be kept in the dining-room or some room accessible to it and the kitchen, or wherever is most convenient. A space should be provided thereon for cook-books and other books pertaining to household management. Card recipe drawers may be used if desired. A metal box with key should be secured for holding stamps and small change. A postal scale; a good inkstand, a number of pens and pencils; blank tabs for memoranda, writing paper and envelopes, paste, blotters, expense books, a file for bills due and bills paid, and a waste basket should form part of the equipment of this desk. Everything that contributes to the management of the business of the home should be accessible to, on, or in this desk.

A Typewriter in the Home.—A second-hand or rebuilt typewriter may be purchased at a nominal cost, and its use in the home will soon justify the expenditure. It saves much time in many ways. Letters, orders and forms can be made out in duplicate on the machine and in other ways it contributes to business-like methods in the management of household affairs.

A Family Budget.—A family budget, or plan of spending, should be made as soon as possible, but in order to do this properly it may be necessary to have a record of all expenditures for a period of at least a year.

Household Accounting.—An expense account in the form of a household ledger should be kept; that is a separate record or account should be kept with each important item of household expense.

Buying.—In buying of local tradesmen and peddlers, do not hesitate to weigh food materials upon your own scales at home, and do not hesitate to let your tradesmen know that you do this. Watch the scales as the clerks weigh your purchases.

Always ask prices before purchasing and if prices are exorbitant do not be afraid to express your opinion to the tradesmen and do not be intimidated by other customers. It is not necessary to establish for yourself the reputation of being a "kicker" but everyone with whom you have business dealings should understand that you are a business woman and that you will not be imposed upon.

The Family Bank Account.—A joint bank account should be opened in the name of both husband and wife, and all moneys from all sources received by both parties should be deposited therein, subject to the check of either party *without the signature* of the other party. Such a bank relationship will help develop *credit*, a most important financial resource (p. 81).

Charge Accounts.—Charge accounts may be opened with reputable merchants and with city department stores, as the latter afford many opportunities unobtainable elsewhere.

Household Bills.—All household bills should be paid once a month, and by bank check, not with cash. Bills due the first of the month should be paid not later than the tenth of the same month.

Receipts.—Receipted bills may be kept in an inexpensive filing case with pockets arranged alphabetically the same as the old-fashioned letter-files. They may be filed alphabetically according to the name of the creditor. Another method of keeping receipts is to paste them in a large bill book. In this case, all gas bills would be pasted on the same pages; all bills for electricity on the same pages, etc. Begin at the top of the page and paste only the top of the receipt; then the second receipt can be partially hidden under the first one and so on until the page is full. There is less need for keeping receipted bills if they have been paid by check as the endorsed check constitutes a receipt.

Instalment Buying.—This method of buying may be indulged in for the purchase of necessary furniture and household fittings. If not heavily in debt, and if assured of an income that is above the margin of safety, there are times when the purchase of musical instruments, books, and other articles that might ordinarily be considered as luxuries, could be indulged in without question. Life

insurance, a savings fund, and an old-age fund should, however, be established before resorting to instalment buying.

Life Insurance.—The head of the family should if possible carry from two to five thousand dollars life insurance, and as much more as possible. Unless one has more than the average income, life insurance should be divorced from investment features such as endowment clauses. If one cannot afford several thousand dollars insurance in old line companies, one should not hesitate to take part of his insurance in assessment associations.

The wife should carry insurance as well as the husband, if it is at all possible to meet the payments necessary. A widow with a life insurance policy has a sure protection against old age. It is at least a guarantee that the maintenance of a mother will not be merely a matter of charity.

Do not borrow on your life-insurance as it is intended for a definite contingency and should be reserved for that. It is poor policy to borrow on life insurance policies.

Borrowing.—Do not borrow from friends or relatives. Do not ask tradesmen to carry accounts longer than the customary period, as that is another form of borrowing. If money is needed, borrow it from the local bank. If you owe money at the bank, pay it before it is due, and not later than the day of maturity. If you owe money and do not pay it when due, do not be offended if you receive notice of the same or a request to pay.

One should not hesitate to borrow money with which to build or buy a home. Neither should one hesitate to mortgage a home, if the money can be invested *safely*, at a higher rate of interest than one has to pay for the loan and the expenses connected with making it.

Those who cannot borrow from banks should investigate possibilities of Building and Loan Associations, Credit Unions, and Morris Banks. Before resorting to questionable agencies such as "loan sharks" for temporary financial assistance, one may better make a confidant of an employer, asking for advice if not for financial assistance needed.

Legal Obligations.—Do not endorse or sign a note for anyone, friend or relative, and do not ask anyone to sign or endorse a note. Do not sign a lease for anyone or guarantee the payment of any indebtedness unless contracted by yourself.

Do not sub-lease property without the consent of the owner in writing and without a full knowledge of your rights and obligations

under the sub-lease. If you have a lease of a piece of property, be sure you know your legal rights before you attempt to sub-lease. Landlords accepting tenants under a sub-lease, generally hold the original tenant responsible for the sub-tenant.

Property.—Husband and wife should hold all real estate in joint-tenancy, and all personal property in common, so that each has equal rights in it. It might be possible to place the household furnishings and personal property under an agreement which will safeguard the rights of the survivor with regard to it. A New York lawyer said, "I always consider that in buying any furniture, it is my wife's. The law exempts $500 worth of personal property, but all will go to my wife."

Engage the Services of a Lawyer.—If necessary legal information cannot be secured from other sources, it will not be amiss for every newly-married couple to secure from a competent lawyer a written statement as to the rights of both husband and wife in property, their legal relations one to the other, and the law of their state in reference to inheritances.

Making a Will.—Every head of a family and everyone possessing real estate or any considerable amount of personal property should make a will. Do not attempt to do this yourself, unless in an emergency, but have a competent lawyer do it for you.

In emergencies, a competent will may be drawn up by any adult of sound mind, or anyone not related to the will-maker may draw up such a will, providing he has no interest whatever in your estate, and if two, in some states three, witnesses attach their signatures by the side of the signature of the maker of the will.

Do not put off the making of a will until old age or sickness comes; like life insurance it should be taken care of early, but as conditions affecting property change, do not hesitate to make a new will.

Become familiar with the laws in your state pertaining to the inheritance of property, and your rights in the interests of property held by husband, wife, parents or children, as the case may be.

Litigation.—Do not resort to the courts to settle disputes except as a last resort. Arbitration will cost much less. This, however, does not mean that you should not obtain legal advice. Do not hesitate to consult a lawyer whenever necessary. His advice may save you many a dollar.

Protection against Fire.—Be sure that your house or apartment is properly insured, and instruct your broker to call you up a

week before your policy expires. If there is a mortgage on your property, be sure that a "mortgage clause" is attached to it, as a fire insurance policy covering mortgaged property, without such a clause, is questionable.

If you have valuable furniture, rugs and pictures be sure and have them insured. If possible try to have a list of your property covered by such insurance attached to and made a part of the policy. Keep your policy and inventory somewhere outside your house.

Simple precautions should be taken against fire. Proper habits should be formed in the care of burnt matches, the use of tobacco, the use and storage of gasoline and kerosene. Fire extinguishers should be placed on each floor of a house, and kept in order. If these are beyond reach of one's means, buckets of water should be kept in convenient places. The kitchen sink might be equipped with a nozzle for attaching a hose, and a piece of garden hose should be kept in reserve in a convenient place for emergencies of this nature. Asbestos, tile and other fireproof roofs reduce the loss from fire very materially, and undoubtedly would prove a factor in securing lower insurance rates.

Insurance Records.—A record should be kept of the amounts of all insurance, name of company, date taken out, premiums paid and date of expiration; with life insurance, record the date premiums are due.

A Household Inventory.—Every family should keep an inventory book in which are listed the various articles of furniture and furnishings of the home. Any blank book will answer and a different page may be given to the different necessary classifications, and the facts of cost, date purchased, etc., should be entered (see p. 276).

Safety Deposit Boxes.—Every family should maintain a safety deposit box in some bank or trust company, in which should be kept all legal papers, such as deeds, wills, insurance policies, mortgages, and other valuable property. A fire-proof box or safe in the household is also desirable.

Magazines and Periodicals.—A record should be kept of all subscriptions and the date of their expiration.

Contributions to Church and Charity.—These should be recorded under appropriate headings. This record will facilitate the calculation of one deduction item for the Federal Income Tax.

Medical Services.—If you are possessed of ordinary intelligence and common sense, a doctor need not be called every time

some member of the family is indisposed. Every mother and father should be familiar with the ordinary principles of physiology. Equipped with this knowledge, a little study of diet and food problems will solve many physical ills, and lessen the professional bills. It is the part of wisdom to have a thorough medical examination of every adult member of the family at least once a year. The dentist may need to be visited oftener.

If one cannot really afford medical services, there are agencies in every large city that will supply such attention at minimum charges and in many cases without any charge. If there is need of medical services, have the best that can be afforded. It is the cheapest in the long run. Do not under any circumstances resort to patent medicine. If a physician is called for an emergency, write down the procedure followed for future use.

Secure from your State University or College, from your City and State Board of Health, from the Federal Government, from the U. S. Children's Bureau, and from the U. S. Public Health Service, at Washington, D. C., the free bulletins published in relation to health and disease and sanitation.

The First-aid Outfit.—A complete first-aid outfit, with book of instructions, should be found in every home. This should be stored in a place sure to be quickly accessible, but beyond the reach of children.

Rules for Children.—A few simple rules should be established for the guidance of children. These rules may be typewritten and tacked up in the room of each child. They should include the hour of rising, of retiring and of meals; the hour for leaving the house for school and the time they are expected to report at home from school; the time for study and for play and the mention of daily duties and work to be performed. For his own development, as well as for the good of the home, every child should early in his life be assigned one or more daily tasks for which he is held responsible, and made to see that he, and the way in which such tasks are performed, are factors in the general good of the home and society.

Allowances to Children.—Do not make allowances of spending money to children, for which they are not held carefully accountable. If desired, make gifts of money from time to time to your children, or give them regular sums of money with which to purchase their own clothing and other supplies as soon as they are old enough. Teach them how to keep an expense account and how to buy. Teach them also how to save and as soon as they

have accumulated enough, introduce them to the mysteries of a bank account. They may be encouraged to save by a promise of a certain sum, say fifty cents for every dollar which they put in the bank.

Children should be taught four things in relation to money: (*a*) How to earn and receive; (*b*) how to spend; (*c*) how to save; (*d*) how to give.

Work of a coöperative nature, to which every member of the family is supposed to contribute, should not be paid for when done by children, but if the child can do work that otherwise might require hired help to do, compensation may be allowed. Small undertakings should be encouraged, such as the raising of poultry, the making of a garden and the selling of the produce raised; newspaper routes, Saturday employment, and similar enterprises teach children the value of money.

Children should be taught early to buy their own small necessities, and as they grow older their own clothing. By assisting in the family marketing, they may gain a sense of values and be taught how to market intelligently.

Perhaps simple problems in investments may be explained and put in operation from time to time. The opening of a savings bank account should be one of the first steps along this line.

Intelligent giving through Church, Sunday School and young peoples' organizations may be the first step in teaching how to give. Individual cases of misfortune and poverty depicted in the newspapers, public demands for assistance in calamities should perhaps be brought to the attention of young people in such a way that they themselves will feel the first promptings of a responsibility that will lead them to part with a portion of their savings in order to help others.

Should Children Pay Board?—So soon as children become economically independent or able to support themselves, they should first be required to pay their own carfares, buy their own lunches and supply their own clothes. As they earn more they should be expected to pay a certain amount for board. This may be fixed at a minimum amount, or it may be based upon the total monthly expense for the entire family for rent, board, and laundry, and apportioned according to the number in the family. Earning capacity, however, should be considered in such an apportionment.

Savings.—A definite apportionment should be made for weekly or monthly instalments. All money should be deposited in the bank, so that a check may be drawn for the monthly savings,

the amount being deducted from the balance as shown on the stub of the check-book and the check should be held, but unsigned. As soon as the savings amount to a few hundred dollars, they should be safely invested at a fair rate of interest. Do not forget to compound your interest as often as possible.

Making Investments.—Do not make any investment without first consulting your local banker. His advice may save you many dollars. If you are a widow, agree with your banker to have him pass upon all of your expenditures above a given sum. Instruct him not to honor your own check for an amount in excess of this sum. This will protect you from hasty action and second thought may convince you of an error in judgment. It will protect you from swindlers, while friends and relatives will soon cease to bother you, if they understand that a hard-headed banker must first pass upon their request for a loan. Do not speculate on the Stock Exchange or elsewhere. Speculation means risks that few can afford to take, regardless of the moral aspect of it.

Old-age Fund.—A portion of the savings should be laid aside for an old-age fund, and this should not be subjected to speculative risks or investments outside of first-class bonds. If not so invested it should be kept in a savings bank at interest and the interest compounded.

Children as soon as they are self-supporting should contribute to this fund. Each one should purchase bonds and pay for them in instalments, to be used by the parents if necessary later in life and if not used to be returned to them at the death of the parents, or the amount to be apportioned out of the estate before an equal distribution is made of the parents' estate.

Parents should not convey the bulk of their estate to children but they should retain their property, both real and personal, during their lives, as a protection against penury and neglect later in life.

In Conclusion.—Any family who will endeavor to run the home upon a business basis will find that efficiency brings as great a return, in proportion, in the home, as it does in business.

Many will object to so-called "new-fangled notions." Others may be too indolent to follow any system, while others may be indifferent. William T. Ellis says, "There are three kinds of people in the world—the wills, the won'ts and the can'ts. The first accomplish everything; the second oppose everything; and the third fail in everything."

Let everyone ask the question, "To which class do I belong?"

CHAPTER XXXV

TO THE TEACHER AND STUDENT OF HOME ECONOMICS

THE fact that the study of Home Economics has not yet been standardized in all of the various schools teaching the subject, often makes it necessary for writers to compile texts that will be sufficiently comprehensive for the uses of all types of schools. This naturally results in giving perhaps more material than might be needed by many schools in order to supply the needs of others. For this reason, a few suggestions in regard to the use of this text may be pertinent.

The Scope of the Book.—Before entering upon the study of this text, the reader or the student first should become familiar with the author's purpose in writing it, which means that a careful reading of the preface should be the first task. Next, examine the table of contents, noting (a) the divisions into which the subject has been apportioned, then (b) the subdivisions of each topic, and finally (c) the subject of each chapter. Having done this, examine carefully the Cross Index in the back of the book, noting the many and various topics that are treated in the text. Compare a few references in the cross index with the text matter, so as to learn the importance of depending upon the index in finding subjects, instead of idly turning the pages of the book with a vague idea as to where the topic may be located. One should learn how to use a book as well as study its contents. The above preliminary work will give the student a general idea of the subject itself, and a visualization of its many topics and sub-topics so that the text may be approached with a clear idea as to the logical development of the subject itself.

Note-Books.—Before beginning the study of the text, every student should procure a note-book. Any blank book will answer the purpose but loose-leaf note-books are particularly convenient. The organization of material in note-books will of course follow the sequence of topics studied, it will call for four sections or possibly separate books—one to cover Part I, the second one for Part II, the third for Part III and the fourth for Part IV, as each part of the text represents kindred topics.

Each part of the note-book dealing with a topic might be divided into three parts; the *first* for answering questions, the *second* for recording the results of investigations and demonstrations, the *third* for entering facts imparted by the teacher, and the *fourth* for miscellaneous notes, reference readings, etc.

Questions and Answers.—It is not intended that students should slavishly answer every question following the various chapters. The teacher may omit any question desired or add original questions of her own. Only such questions as the student may have time to answer, or those that are especially pertinent to the class, or to local conditions should be given.

Demonstrations.—The same instruction pertaining to questions is pertinent to original investigations and demonstrations. The environment of the student, the nature of the course being given, and the character of the class, must govern the assignment of such work.

In asking students to make outside investigations which necessitate requests from business men for specific information, the teacher should assign certain students to gather certain types of information, so that no one business or professional man may be burdened by similar demands from many students. The same rule should be followed in asking students to secure printed forms and blanks for exhibit to the class, unless they are to be purchased. Printed legal forms are sold by stationers and if it is desirable for the students to secure them, they should be purchased and incorporated as a part of the note-book. Old forms already used and of no value may be secured from the student's own home.

Visits to the offices of public officials should be made either by the entire class, or in groups, at various times, but such visits should never be made without first securing, in advance, the consent of the official to be visited.

Every student of home economics should become familiar with the location of city and county officers and with their duties, and visits to their offices may sometimes prove interesting and profitable.

Visits of Outside Business and Professional Men to the Class.—From time to time, the teacher should secure the consent of various business and professional men and especially public officials to visit and address the class upon the subjects represented by their work. The County or City Treasurer, for instance, could give

the class much practical information and answer many questions difficult to make clear or answer in a textbook.

Themes for Debate.—Time should be made during the school year for at least several debates upon home economic subjects of especial interest to the class or community. A few suggested themes for this purpose will be found following some of the chapters.

References.—The Bibliography of a subject being studied should not be neglected. Research work demands reference to many books and periodicals and the student should become familiar with the various material that has been written upon the subject under consideration. A knowledge of the various writers and books on a special subject are the keys that will unlock for the student the store-house of information necessary to a successful mastery of such a subject. Teachers will find it wise to give specific references to pages in reference books bearing on topics under discussion.

The Text Itself.—The slavish following of any text is poor pedagogy. The Business of the Household is a subject that should be studied in every High School, but it would be folly to expect the smaller High Schools to do work that only can be done successfully in more advanced classes. For such a reason, in some schools the teacher will do well to arrange an outline for such a course as may seem best adapted to the needs of the class. Then, instead of requiring an intensive study of every page and chapter in the text, the student may be directed to the specific lessons desired. The teacher in such instances should mark for the students certain chapters that should be read and others that require intensive study. In this way, the text may be adapted to the needs of any Home Economic course.

Students should be taught not to accept general statements as standard rules applying to all cases. They should however, be made to see the principles involved and taught to modify or apply those principles to varying conditions.

In Conclusion.—Adapt the text to the needs of the class or student. The student cannot shape her parents' home to meet all the principles taught, but all of the principles mentioned may be in some way adapted to the needs of the student and his or her home.

An attempt should be made to enlist the interest of parents in the students' study of the Business of the Household, and assurance should be given parents that any information given the student pertaining to the family, will not become the property of the class if

it is supposed to be confidential. Caution should be exercised in asking students embarrassing questions pertaining to the finances of the family. Suggest to the student that father and mother might be interested in this book, and that by calling their attention to it, or by reading from it to them, discussions in the home might be started that would result in securing the parents' coöperation in this study. From their own experience, parents might be able to corroborate or amplify the statements made in the text or explain how the principles involved have been applied in their own home.

Finally, because some statement in the text may not have been proven by teacher or student, do not pass judgment upon it until an investigation has been made to learn if the principle or fact stated might not apply to some condition, circumstance or place with which the student or teacher may not have had experience. Discussion on the part of students should be provoked and with the exercise of judgment and common sense, this study of the Business of the Household will be found one of the most necessary of all subjects embraced in the curriculum of Home Economic classes and schools.

CROSS INDEX

Note:—A Cross Index should be of more value than mere references to the contents of a book. It has other values that should be studied by every student or user of a reference or text-book.

It gives the user a general as well as a specific knowledge of the arrangement and purpose of a book and thus makes the text a more valuable tool than it otherwise would be.

When topically arranged, each group of topics becomes a subject that may well bear further and more detailed study, not merely in the text but from outside investigations and collateral readings. Such groups furnish themes for investigation, debates, and research work.

It is to be hoped that every user of this book, at least, will carefully study the Cross Index as well as the Table of Contents at the beginning of the book, before reading or entering *upon the study* of the text.

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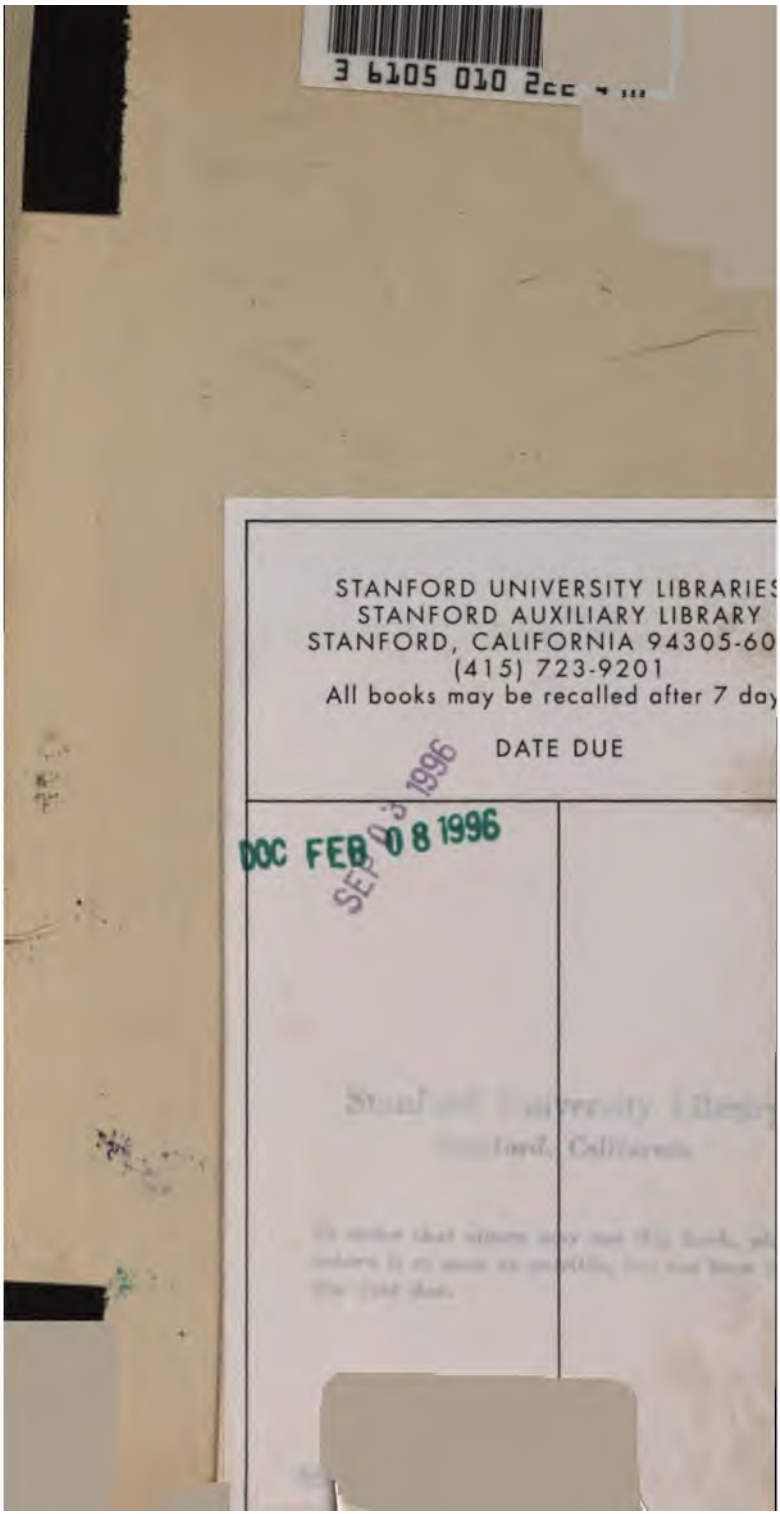
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